Official Organ New York Academy of Medicine, Laryngological Section.

VOL. II. APRIL, 1897. NO. 4.

THE LARYNGOSCOPE

A MONTHLY JOURNAL
DEVOTED TO DISEASES OF THE

NOSE - THROAT - EAR

FOR CONTENTS SEE NEXT PAGE.

SUBSCRIPTION, $2.00 PER ANNUM, IN ADVANCE.

P. O. BOX 787. ST. LOUIS, MO.

OFFICE OF PUBLICATION, 707 OLIVE STREET.

[Entered at the Post Office at St. Louis, Mo., as Second-Class Matter, in July, 1896.]

Official Organ American Laryngological, Rhinological and Otological Society, Southern Section.

CONTENTS.

ORIGINAL COMMUNICATIONS.

CLINICAL REPORTS.

NEW INSTRUMENTS.

CORRESPONDENCE.

EDITORIAL DEPARTMENT.

EDITORIAL.

SOCIETY PROCEEDINGS.

SOUTHERN SECTION AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY.—CONTINUED.

NEW YORK ACADEMY OF MEDICINE.

BOOK REVIEWS.

MISCELLANEOUS NOTES.

THE

LARYNGOSCOPE.

VOL. II. ST. LOUIS, MO., APRIL, 1897. No. 4.

ORIGINAL COMMUNICATIONS.

EXOSTOSIS OF THE SEPTUM AS A CAUSE OF CHRONIC NASO-PHARYNGITIS.*

BY CHARLES H. KNIGHT, M.D., NEW YORK.

One of the most obstinate and annoying disorders met with in the upper air tract is chronic naso-pharyngitis. Its prominent subjective symptoms are a sensation as of a foreign body above the soft palate and a frequent desire to clear the throat by the act of "hawking." The subjects of this condition are prone to attacks of acute naso-pharyngitis, which may be very rebellious to treatment. They often form a peculiar habit of forcibly expelling short blasts of air through the nostrils in an instinctive effort to get rid of an obstruction. This little trick, repeated at intervals of a few minutes, becomes a source of great annoyance to the patient's associates. In an ordinary "cold in the head," which everyone has at times and almost everybody neglects as being a trivial affair, the naso-pharynx usually becomes involved earlier or later. As a matter of clinical experience, we find that attacks of acute naso-pharyngitis are exacerbations of a chronic condition, and are encouraged by the existence of some nasal abnormality, such as a septal deflection, or an hypertrophy of the posterior end of the inferior turbinated body. The relation of naso-pharyngitis to

*Read before the Section in Laryngology of the New York Academy of Medicine, December 23, 1896.

lymphoid hypertrophy in the vault of the pharynx, to inflammation of the pharyngeal bursa, and to suppuration in the accessory sinuses, is by no means infrequent, and many cases, on careful examination, will prove to have their source in one or the other of these pathological conditions.

What is believed to be a very common etiological factor in post-nasal disorders, and one easily overlooked in the usual rhinoscopic examination, is *exostosis of the septum*. It has been my frequent experience to meet with cases of obstinate "post-nasal catarrh," so-called, associated with a tendency to "catch cold," which yielded only after the removal of a conical projection from the bony septum, so situated as to interfere with breathing or drainage. Such a projection may assume the form of an irregular ridge running forward more or less parallel with the floor of the nose, and impinging upon or even adhering to the inferior or middle turbinated body. Under such circumstances, it can hardly escape detection. It may be concealed by an anterior turbinated hypertrophy, or a deviation of the septum, and may be discovered only by the use of cocaine and the probe. No rhinoscopic examination is complete without recourse to these aids to diagnosis.

It is uncertain whether these exostoses of the septum originate in traumatism or result from hypernutrition. They are seldom, if ever, met with in early life, which hardly would be the case if the former were the sole cause. Moreover, they are found far back upon the vomer in a situation supposed to be especially protected from injury. Behind such an obstruction there always exists a more or less extensive area of hyperemia owing to rarefaction of the air during inspiration. This region is, therefore, more susceptible to the influences which are usually recognized as conducive to an acute naso-pharyngitis. The disturbances due to diminution in air pressure are perhaps less serious than those dependent upon impeded nasal drainage. In other words, a very considerable bony obstruction may exist without marked derangement of the nasal respiratory function. Either its growth is so slow that the patient becomes habituated to it, or else the opposite nostril is so ample as to compensate for the stenosis, or possibly it may be quite above the level of the air current. Such a projecting shoulder offers a site for the lodgment and retention of secretion, which in process of decomposition becomes an additional source of irritation. The indications are therefore clear in every case of chronic naso-pharyngitis—in the first place, to supplement simple inspection of the nasal chambers by exploration with the probe after thorough cocainization, and, secondly, to remove all overgrowths from

the septal surface which seem to obstruct respiration or drainage. The latter statement may seem somewhat radical, but I believe it may be accepted even by those conservatives who deprecate the unwarrantable activity in nasal surgery which has prevailed in recent years.

Whatever good may be accomplished in certain cases of catarrhal disease by the list of astringents and various local applications usually recommended, they will fail to give permanent relief when the mechanical obstruction referred to exists as an etiological factor. In every case of intractable and recurrent naso-pharyngitis, it should be sought for, and, if present, removed.

I hope that my position on the question of intranasal surgery may not be misunderstood. It is very far from my intention to urge the removal of every septal irregularity. On the contrary, I believe it is high time that we should learn to have more respect for the intranasal structures. No one condemns more heartily than myself the wholesale slaughter of turbinates which may seem to be simply a little larger than our æsthetic taste demands. But, on the other hand, there can be no good reason in attempts at preserving a membrane which has undergone polypoid degeneration, or in a state of such advanced hyperplasia that its function is wholly abrogated. The late Dr. Henry Schweig, of this city, many years ago advocated the plan of "submucous cauterization" of the hypertrophied turbinates, and for the purpose used a sharp-pointed cautery electrode. The idea has been lately revived by Blondian*, and in another form by Dr. Norval H. Pierce†, of Chicago. Efforts in this line are certainly most commendable, provided they be limited to tissues which are still useful. There certainly can be no sense in trying to save those which are practically foreign bodies. The advice is sometimes given to trim down the turbinated bodies rather than meddle with a deformed septum in cases of nasal stenosis, the impression being that the septum is particularly resentful of surgical interference. In cases of the class referred to in my paper, I believe there should be no hesitation in choosing to attack the septum. In my experience these wounds do well. Examined months and years after operation, no trace of the original trouble can be seen except perhaps a slight bulging of the septal surface. Hemorrhage at the time of operation, or after the cocaine effects have passed away, is often quite free, but only on two or three occasions have I found it necessary to plug the nostril. Under the use of a fresh, strong solution of cocaine the removal of an exostosis may be accomplished absolutely without pain, unless the patient is

*The *Jour. Laryngology*, etc., Dec. 1886, p. 333.

†The *N. Y. Med. Jour.*, 1896, No. 938.

the unfortunate victim of an idiosyncrasy which resists the anesthetic effects of the drug. Some of our patients seem to enjoy the distinction associated with a surgical operation, while others dread the knife and will submit to months of treatment with sprays and medication rather than take the chance of pain. It is a satisfaction to be able to assure such individuals that no great amount of pain need be apprehended either during the operation or afterwards. The increase in comfort as regards nasal breathing, and the relief from symptoms following the removal of one of these septal deformities, are generally admitted to be full compensation.

In conclusion, let me say a few words regarding the method of removing an exostosis. When its projection from the surface of the septum is abrupt, there is but little difficulty in operating with a hand saw. And in most cases a saw, preferably one of the pattern known as Bosworth's, is a convenient instrument. If the base of the bony spur is shelving, the saw should be started in an oblique position, its teeth being directed towards the septal surface. When once it has made a furrow through the soft parts, it may be brought to a vertical line without danger of slipping. In order to obviate stripping up the mucous membrane at the completion of the section, it is a good plan to make a preliminary cut from below upwards, the main division of the bone being made from above downwards. The various electric saws, devised or modified by Roe, Schmidt, Potter, Black, and others, are very ingenious, and are thought to have the advantage of doing the work more quickly. In exostosis of unusual width, it will be found easier to tunnel through with the electric nasal trephine, and afterwards trim off the projections left by the trephine with cutting forceps or the saw. Exostoses of moderate extent, which have not become densely ossified, may be removed with the spokeshave, suggested by Woakes; but I am almost prepared to say that a septal excresence which this instrument is capable of removing, does not require interference. Bony outgrowths often offer too great resistance; soft hyperplasiæ are better reduced by means of the electric cautery.

Nothing has been said about the relation of septal exostosis to reflex neuroses, or to various aural disturbances—not because it is by any means infrequent or unimportant; but because this phase of the subject opens too wide a field for discussion at the present time.

To most of you I fear that the contents of my paper may seem extremely elementary. But I cannot help feeling that in our search for strange and unusual morbid phenomena, we are apt to forget first principles. An occasional review of the field and a comparison of experiences may be of value to all of us.

TURBINECTOMY OR RESECTION OF THE MIDDLE TURBINATE; REPORT OF ONE HUNDRED AND TWENTY OPERATIONS.*

BY J. A. STUCKY, M.D.

Member of Ky. State Med. Society; Lexington and Fayette County Med. Society; Central Ky. Med. Society; Ex-President American Rhinological Society; Member of American Medical Association; Fellow of American Laryngological, Rhinological and Otological Society, Etc., Etc.

By the term turbinectomy, I mean the removal by surgical means of a portion of the turbinate bone and not the whole of it. In this report I refer to operations upon the anterior portion of the middle turbinate, and do not include operations upon the inferior bone.

Removal of a part or the whole of the inferior turbinate is now of frequent occurrence for the relief of some forms of nasal stenosis, having been greatly popularized by the published reports of Carmal Jones and others of London.

Removal of the anterior portion of the middle turbinate, if one may judge from reports published in our leading journals, it seems to me, has not received the attention of the rhinologists that it deserves. My first turbinectomy of the middle bone was performed in 1889, and it was with some timidity I removed the hypertrophied process, and with no little interest and anxiety I watched the result. This was so marked in that my patient was speedily relieved with very little discomfort, and these results continued to follow almost every operation (where indicated), that it is now a favorite method of treatment with me, and is so far superior to the use of chemical or electrical applications that I rarely now consider them, but infinitely prefer the removal of the offending portion by use of the cold snare and cutting forceps.

The middle meatus being by far the most important division of the nasal cavity, from a physiological and surgical view, because of its containing the hiatus semi-lunaris, openings of the frontal sinus, the anterior ethmoidal cells, and the orifice of the maxillary sinus, we can readily see how any interference with natural drainage, whether by enlarged turbinate, polypi or deviations or the septum nasi, will produce not only disagreeable but serious trouble by mechanical retention of the normal secretions, and as a result lead to purulent inflammation.

The operation is, as a rule, easily and rapidly done; the parts being thoroughly anesthetized by applications made on pledgets of cotton to the parts, of a ten per cent. each of cocaine and resorcin in aqueous solution. The addition of the resorcin to the cocaine I think quite a

*Read before the Southern Section of the American Laryngological, Rhinological and Otological Society, New Orleans, March 3, 1896.

valuable one, in that it increases the anesthetic effect of the cocaine and prevents any unpleasant or toxic or after effects of the drug.

The loop of the cold snare is easily slipped over the process of the turbinate, and with a Wright's snare rapidly cut off. I prefer this instrument because of its strength, ease of manipulation, and the rapidity with which the loop can be drawn into the canula, even when cutting through dense structures. It is also so constructed that the hand of the operator in no way interferes with the illumation of the parts operated on.

Occasionally when the bone is very hard it is necessary to make a retaining point for the wire loop; this I do with the nasal scissors or cutting forceps, as devised by Robert Myles, of New York. If the snare fails to grasp and remove enough of the turbinate to entirely relieve pressure and restore drainage, the cutting forceps are used. Usually the snare, scissors, and cutting forceps are all the instruments needed to perform this operation. In the large majority of cases the snare alone was sufficient.

If the ethmoid cells are diseased, filled with pus or polypoid granulations, the sharp curettes and cutting forceps are needed in addition to the instruments mentioned.

The hemorrhage is quite free for a few moments, but the application of a gauze tampon to control the bleeding was found necessary in less than two per cent. of my cases.

The patient generally complains of pain in the forehead, and just beneath the eye, after the operation. I have found that a ten or fifteen grain dose of soda salicyate relieves this more promptly and effectually than anything else. Rest for a few hours in the recumbent position I think always advisable, though many of the cases operated upon walked to their homes or places of business immediately after the operation of simple turbinectomy, without any special discomfort.

Whenever any of the accessory cavities of the nose were operated upon at the time of removing the turbinate process, absolute rest in bed for twelve or twenty-four hours is strictly enjoined.

In every case I caution the patient not to blow the side of the nose operated upon for twelve hours. At the end of this time the clot is removed, and the anterior and posterior nares thoroughly washed by means of the spray with warm alkaline antiseptic solution. The after treatment consists in the daily use of the same solution, with the hand atomizer, two or three times a day, by the patient.

We would naturally suspect that atrophy of the remaining portion of the turbinate would be the result of the operation, but observation does not prove this; on the contrary, a slight hypertrophy of the tissues

covering the tip of the bone is sometimes observed. In nine cases this was of sufficient size to necessitate its reduction, which was done by touching it lightly with chromic acid crystals. One application only was necessary to reduce it to proper size.

My experience agrees with that given by Drs. William Hill and Dundas Grant, that "there is a certain amount of regeneration of tissue in from six to ten weeks after the removal of the turbinate process." I have been able to see the patients operated upon at short intervals for months, and in some cases several years after the operation, and so far as observed the physiological function has been in no way interfered with.

The number of males in the report presented is 49; females 71. The oldest patient operated upon was 73 years of age; the youngest 12. The average ages of the largest number operated upon was between 25 and 40 years. In sixty-two per cent. of the cases the turbinate was so enlarged as to press tightly against the nasal septum and nearly completely occlude the middle meatus by contact with the inferior turbinate.

The following is a classfied list of one hundred and twenty resections of the middle turbinate, which I present to you without further comment, hoping that the points of interest overlooked in this brief report will be brought out fully in the free discussion which I trust will follow:

1. Stenosis, due to hypertrophy and hyperostosis of the middle turbinate; 35 cases.
2. Polypoid degeneration and enlargement of the middle turbinate; 48 cases.
3. Cyst of the anterior process; 3 cases.
4. Acute frontal sinusitis; 7 cases.
5. Ethmoiditis (suppurative); 11 cases.
6. Empyema of the maxillary sinus; 16 cases.

The classes of cases in which most marked and rapid relief was given were 1, 4, 5. Especially was the relief marked in class 4, where, after removing the anterior process, drainage of the sinus was restored through the infundibulum.

In classes 2, 3 and 6, the results were not so rapid and marked, but in the main were very satisfactory.

In conclusion I would suggest that the operation of turbinectomy is indicated whenever the bone presses against the nasal septum, or encroaches upon the inferior bone enough to close the middle meatus or in any way produce obstruction to the natural openings of the accessory cavities.

Lexington, Ky.

DEVIATION OF THE CARTILAGINOUS NASAL SEPTUM. WHAT MEANS OF SUPPORT AFTER INCISION?

BY E. W. HELTMAN, M.D.

Diseases Eye and Ear, Toledo Medical College, Toledo, Ohio.

The attempts at cure of this distressing condition have not always been of the most gratifying nature. The tendency to recur and the discomfort caused the patient by the various means of support after incision, have made this class of patients not very desirable.

Diagnosis of deviation is easily made; readily distinguished from an enchondrosis by the presence of a concavity on the opposite side. It is quite common; occurring nearly as often in the female as in the male. The symptoms are the deformities and those resulting from the stenosis.

When a case presents for operation, the question naturally arises—what means of support shall be used to get the best result and cause the least annoyance to the patient? I have used oakum, the ivory plug, cork splint, Mayer's vulcanite tube, etc., etc. During the past eighteen months I have used the vulcanite tube entirely, and with much satisfaction. Its shape is well adapted to the nostril—made in various sizes—easily introduced and removed. Being hollow, it is more cleanly, and allows patient to breathe through the nostril, thus removing that feeling of discomfort of a plugged nostril. When the incision has thoroughly healed, we may allow our patient to remove, clean, and replace the plug. To the out-of-town patient this is quite an item, as it does not require a daily visit to the office. I have used the tube a number of times, and, though nine to twelve months is a short time to judge results, comparison with results of same period of time with other means of support is favorable to the tube.

I wish to report a single case: Frank U. was referred to me by Dr. Walker. The case was one of considerable interest, as, in addition to the deviation, the septum protruded from the nostril fully one-fourth of an inch. The young man sought relief more on account of the uncomfortable and unsightly protrusion than the discomforts of the deviation. He was a mouth breather, and had considerable discharge from the naso-pharynx.

Right nostril almost occluded about a half an inch from external opening; septum protruding from same side, the end of which was covered with a scab. It was tender and irritable, and would bleed if scab was accidentally removed. Nose was broken from being hit with a ball bat five years before; says he did not notice protrusion of septum for two years afterward. March 1st, 1896, assisted by Dr. Walker, I

operated on the patient; chloroform anæsthesia. Nose was cleansed, and a stellate incision was made in septum on convex side, avoiding as much as possible the cutting of the mucous membrane on the opposite side. The finger was introduced, and septum straightened as much as possible. The nostril was then cleansed with Dobell's solution, and an incision made through mucous membrane covering the protruding portion. Membrane dissected back, and a sufficient amount of cartilage removed, wound cleansed, and membrane stitched. The long nasal forceps were now introduced and septum thoroughly straightened. Nostrils again washed out, and a sterilized vulcanite tube introduced on convex side. In this case I used the tube on one side only, as the mucous membrane on concave side was not cut. After second day, tube was removed daily, cleansed, nose sprayed, and tube returned. After a week patient was allowed to remove the tube daily, cleansing and returning it. After first week, saw patient twice a week for four weeks, when he was dismissed. Patient was seen eight months after operation. Nostril large, and breathing perfectly. No deformity. Result very satisfactory. A number of others operated upon since, give promise of equally pleasant results.

HAY FEVER.*

BY W. F. STRANGWAYS, FLINT, MICH.

The author read a paper, over a year previous, entitled "Hay Fever, a Successful Treatment Founded on a New Theory,"† which attracted considerable attention. In this former paper it was claimed that while pollen, as a rule, played a part in this disease, it did not irritate the mucous membrane nor produce a naso-motor paresis by its direct influence; that the amount of pollen in the air was too small to act as an irritant. That in all probability a protoplasmic substance, found in pollen and elsewhere in the vegetable kingdom, acted as a ferment, causing the formatiom of a toxine which was the real exciting cause. The theory was advanced that the toxine or toxines could not be developed in acid solutions. The exhibition of a wash of

Acetic acid	m ij.
Resorcin	grs. iss.
Sodium Chloride	grs. iv.
Aqua dest	℥j.

gave complete relief in many cases, and the administration of large doses of muriatic acid, well diluted, increased the body's resistive forces, and inhibited the generation of the toxine.

*Read before the Forty-fifth Annual Meeting of the North-Eastern District Medical Society of Michigan. Original abstract.

†*Annals of Ophthalmology and Otology*, Vol. V., No. 1, and THE LARYNGOSCOPE, Oct., 1896.

If this theory is correct, it partially explains why only a percentage of those having obstructive pathological conditions are hay fever subjects, and why the introduction of large quantities of obnoxious pollens into the nares of the others affects them no more than any of the ordinary dusts.

The author found most hay fever subjects tolerated very large doses of acid, if well diluted. He has given as high as one drachm of the C. P. acid, well diluted, during each 24 hours. If this remedy is used for two or three months prior to the expected attack, smaller doses will answer.

Nature works every moment, while local applications exert only a temporary influence; yet, often, this temporary assistance turns the tide in our favor. The best results can only be attained when good drainage and proper circulation is obtained.

Since writing the first paper the author spent considerable time investigating the "impact theory," and concludes that the amount of pollen in the air is far too small to have any injurious mechanical, medicinal or poisonous influence. His investigations showed one rag weed plant for every thousand square feet surface, and from inquiry he learns that an elevation of several hundred feet above the earth's surface does not give relief. Probably rag weed pollen floats to 1,000 feet elevation, but if the limit is placed at 500 feet it would give, for every plant, 500,000 cubic feet of air, not for one day only, but for six weeks at least. If the whole plant were pollen there would be a dilution of one part pollen to fifteen or twenty billion parts air. The rag weed was taken as an example, as the rose and golden rod pollen is much smaller in quantity.

Early in September a known volume of air was forced against a plate of glass besmeared with glycerine and then through a double filter of absorbent cotton. On the plate a few grains of pollen were found; in the cotton, none. These experiments demonstrated to the author that the amount of pollen in the air is so small that it is a physical impossibility for it to exert any direct immediate noxious influence.

Estimating the volume of tidal air at 25 cubic inches, his experiments showed an inhalation of not more than one grain of pollen for every thirty respirations.

The author reiterates that if his estimates are approximately correct, it demonstrates that it is the toxine or toxines generated from substances in the nasal chambers that is the cause of hay fever, and that our efforts to prevent or cure this affliction should be directed against the formation of the toxine or toxines.

The doctor condemns the use of morphine for the relief of this trouble.

THE PROGRESS OF LARYNGOLOGY.*

BY W. SCHEPPEGRELL, A.M., M.D.,

Vice-President of the American Laryngological, Rhinological and Otological Society, New Orleans, La.

It is with much pleasure that I welcome you to this, the first meeting of nose, throat, and ear specialists in the South. Although the branch of medicine, whose consideration is the object of this Society, is still comparatively young—in fact, the first man, Garcia, who examined the larynx with the mirror being still among the living—it has made such rapid strides that it now holds a prominent position among the older branches of medicine. Although scarce twenty years have passed since the treatment of such important diseases as those of the nose, throat, and ear was relegated to quacks and charlatans, still this subject has been taken hold of by earnest men—men striving hard to arrive at truth, and seeking the advancement of this subject—so that at present there are many workers in this field in all portions of the civilized globe.

Although the nose has such an important function in preparing for respiration the air—the *sine qua non* of human existence—it is comparatively recent that its physiological functions were well understood. We can all remember the time when a student would pass his course at a medical college without ever having seen the interior of the nostrils or inspected the larynx or the ear, and this subject is even now a *terra incognita* to a large majority of practitioners of the present day. This is largely attributable to the fact that the medical colleges have heretofore given so little attention to this subject. But a few years ago, the number of colleges in whose curriculum the subject of diseases of the nose, throat, and ear was considered was comparatively few; and where instructions were given on this subject, it was usually done in such a manner as to indicate that it was of secondary importance to other branches of medicine.

This state of affairs, however, has undergone a change, and the majority of prominent colleges now not only give earnest attention to the consideration of diseases of the nose, throat, and ear, but have established chairs for special instruction in these diseases; and the time is not far distant when the college which does not give proper attention to this branch of medicine must be relegated to those whose methods and advantages have fallen behind the modern standard.

In order to obtain the benefits of the co-operative study of this subject, societies for its advancement have been established in England,

*President's Address at the meeting of the Southern Section of the Am. L., R. & O. Society, at New Orleans, March 3, 1897.

in Germany, in France, and in America, and the majority of advanced nations have now their societies representative of this branch of medicine. The discussion of the many subjects of interest in our specialty cannot but tend to advance our knowledge of this subject, and the comparison of our individual experiences and the analysis of the results obtained will continuously advance our knowledge, and we shall be the better prepared to relieve the sufferings of our patients.

During the past year, two important additions have been made to the methods of our specialty, viz.: the *X-rays* of Roentgen, and the *direct laryngoscope* or *autoscope* of Kirstein. In spite of the very conservative statements of the discoverer of the X-rays, the sanguine enthusiasm of the masses has over-rated the value of their application in medicine and surgery, and it is only natural that the return swing of the pendulum should create a certain amount of discouragement; but a careful analysis of the work that has been accomplished, and the scientific investigations that are still being made, give us reason to hope that the X-rays will not only be of marked benefit to surgery generally, but also in our particular specialty. Foreign bodies in the œsophagus have been easily and accurately located by this method. We had hoped that the X-rays would throw new light on the diagnosis of the disease of the accessory sinuses; but thus far, however, the results obtained in this direction have not been very encouraging, this being due principally to the fact that pathological conditions of these sinuses are usually limited to the soft tissues, which are transparent to the X-rays, and that they are surrounded by an osseous wall which offers a much higher resistance to the passage of the rays. It is to be hoped, however, that this method, when more perfected, will materially assist us in making a rapid and unequivocal diagnosis of these cases.

The subject of direct laryngoscopy is also of great interest; and while, unfortunately, it cannot be applied to the examination of all cases, in fact, not even to a large proportion of them, still it is certain that where it can be applied it offers the greatest advantage, and it is certainly a valuable addition to our methods. It is of special importance in the application of surgery to the larynx; and in a method of treatment of laryngeal tuberculosis, which I shall have the privilege of bringing to your attention at this meeting, it has been of the greatest service in facilitating the treatment in those cases in which it could be applied.

In concluding these remarks, I would express my sincere appreciation to the Reception Committees, who have spared no efforts to contribute to the enjoyment of our visiting members. I would also express to the members of the society my sincere thanks for their hearty

co-operation in organizing this meeting. I sincerely trust that this will be the first of a long series of such meetings, which will be held in the South, which will tend not only to the advancement of our knowledge, but also to increasing the friendly relations of its members.

TUBERCULOSIS WITH SYPHILIS OF THE LARYNX.

BY E. HARRISON GRIFFIN, M.D.

Lecturer on Diseases of the Throat and Nose, Bellevue Hospital Medical College; Attending Surgeon to the Throat and Nose Class of Bellevue Hospital Outdoor Department, New York.

When there is a doubt of the correct diagnosis of a case, such as cancer, tuberculosis, and other kindred affections, the microscope is called into play, a section examined, and the diagnosis made certain.

The microscope is a great aid to a diagnosis; but it is often misleading, when we have to deal with a mixed sore of the larynx, such as a tubercular ulcer and a syphilitic ulcer side by side, which case is liable to occur quite frequently.

The diagnosis is given of a tubercular sore, and the presence of a syphilitic infection passed over and undiagnosed, and treated only as a tubercular ulcer.

It is in these cases that the well-trained eye is called into play to diagnose the affection.

Syphilis of the larynx is again and again mistaken for tuberculosis, and the diagnosis seemingly confirmed by the microscope, because the patient has some tubercular disease of the lung, and the sputum examination gives this alone.

Syphilis grafted upon a constitution that is prone to tuberculosis, renders the patient more susceptible to the development of consumption, if the syphilis be not quickly brought under proper treatment and the treatment conscientiously pushed.

Syphilis in conjunction with tuberculosis, if the syphilis be treated and the tubercular affection also treated, renders the tubercular disease less virulent, and prolongs the life of the patient.

These are clinical facts that I have observed again and again, where I have been called upon to treat these lesions of the upper air tract.

A case of tubercular ulcer of the larynx, pure and simple, will generally prove fatal in the first six or ten months, or even in a shorter time. A case of tuberculosis of the larynx with syphilis of the larynx may pull through for one to three years, if the presence of the

syphilitic ulcer be diagnosed and treated at the start, and the patient conscientiously follows out the prescribed directions.

These clinical facts were drawn to my notice by the case of a male, whom I treated some years ago at the Bellevue Clinic.

This patient lived in the lower part of the city, on the east side of town, about three miles from the hospital; he walked this distance back and forth, in all kinds of weather, twice a week to have his throat treated at the clinic. The patient was in abject poverty, and with difficulty obtained the necessary amount of food to exist. His principal diet was tea and bread. Meat was a luxury, and only obtainable at times. I mention these facts to show that the case under observation was at the start handicapped by insufficient food and poor hygiene—two strong factors that are required to bring any case of tuberculosis or syphilis to a satisfactory ending. The patient, male, æt. 36, complained upon his first visit of a huskiness of the voice, a severe cough and slight pain in eating. He had first noticed the cough about six months before he applied for treatment. He had lost about fifteen pounds in weight, and was worried by night sweats. An examination of the lungs showed consolidation and the presence of the sub-crepitant rale.

An examination of his larynx showed a tumefaction of the arytenoid cartilages. The left cartilage was covered with a gray deposit. The right cartilage in conjunction with the swelling had a small ulcer about the size of a bean.

The epiglottis was swollen and infiltrated. The entire membrane of the larynx was bathed in a profuse discharge of mucous.

A history of syphilitic infection of five years previous was acknowledged. The diagnosis was made of tubercular and syphilitic ulceration of the larynx, and the patient placed upon a combination of the iodide of potash and mercury.

The ulceration of the larynx yielded to the syphilitic treatment; but again developed if medicine was stopped for any length of time. The grayish deposit in the larynx at no time ulcerated, but remained stationary for the three years that the case was under observation. After having this condition of the larynx for over three years, the patient eventually died of a pneumonia. His sputum was examined and the tubercle bacilli found. If this diagnosis alone had been accepted and the syphilitic ulcer of the larynx overlooked, the patient would have died in three months from his first visit, not of a tubercular ulcer alone, but from a progressive syphilitic ulcer, which would have destroyed the larynx, and the patient would have died from inanition, with the erroneous diagnosis of consumption.

The importance of the presence of these two ulcers in the larynx at the same time cannot be overlooked, and the point borne in mind that a patient suffering from syphilis and tuberculosis of the larynx at the same time, the diagnosis of phthisis alone will be returned if the sputum be microscopically examined and this alone relied upon.

Another interesting point in this case was that the tubercular deposit in the larynx remained non-progressive for three years under the treatment for syphilis.

CASE II. Male, æt. 45; average weight in health was about 240 pounds; had contracted syphilis when twenty years old, and had been treated off and on since that time. This patient would consume some days, according to his own account, over thirty whiskies and as many cigarettes as he could smoke.

He applied at the clinic, complaining of a sore throat and night sweats. His weight was reduced to one hundred and sixty-four pounds; he complained of a hard cough and pain in eating.

An examination of his larynx showed a grayish deposit over both arytenoid cartilages, which were slightly œdematous; his right arytenoid had a small ulcer that was covered with a purulent discharge. His sputum was examined and tubercle bacilli were found.

Mucous patches were present on the tonsil. Patient was placed upon a syphilitic treatment, also creosote and morphine for his phthisis. In a month the ulcer in his larynx had healed; but the tubercular deposit remained unchanged, but was not progressive.

The treatment in this case was varied, and it was found that the patient improved much more under the syphilitic treatment than when he was put upon the tubercular treatment alone.

I report these cases, but I can augment my assertions by over fifty of these cases that I have studied during the past year, and they sustain the clinical facts that:

1. Tubercular and syphilitic ulcerations are found side by side in the larynx.

2. That the presence of a syphilitic ulcer by the side of a tubercular ulcer in the anatomy exercises a moderating influence upon the tubercular deposit, if the syphilis be treated, and prolongs the life of the patient.

3. Do not rely upon the report of the microscope in all these cases, as the tubercle bacilli will be found if there be a phthisis, but the syphilitic element, if present, is overlooked.

4. In the case of a mixed sore, the syphilitic ulcer will generally progress quicker than the tubercular, but can be easily controlled if the right diagnosis is rendered.

112 W. 45th St., New York City.

ANATOMICAL DEFECTS IN THE FAUCIAL PILLARS.*

BY JAMES E. NEWCOMB, M.D.

Attending Laryngologist, Roosevelt Hospital, Out-Patients' Department, and Demilt Dispensary, New York City. Fellow American Laryngological Association.

During the last few years quite a number of cases have been reported in which there has been a defect—generally in the shape of a perforation—of one or both of the faucial pillars. Some of them have been regarded as a legacy from a preceding ulceration, or other destructive process, but in the majority of instances no such explanation has been possible, and the condition has been regarded as congenital. These cases have generally presented a hiatus on each side of the throat at the point where the pillars unite with the soft palate. The openings have been symmetrical and oval, their short and long diameters averaging about 3 mm. and 10 mm. respectively. In some cases they have actually encroached upon the soft palate, but more often they have been lower down, in the pillars themselves, causing even a true isolation of either the anterior or posterior pillars. The edges have been smooth, and the surrounding mucosa of normal color. No cicatricial tissue has been present, or other evidence of previous local disease. Along with this condition the tonsils have frequently been found in a rudimentary state.

Three cases belonging to this category have fallen under my personal observation, and after a study of all the cases thus far reported it occurred to me that it might be opportune to briefly call your attention to the matter.

In the first place, it is seen that under the same general heading there have been described two distinct classes of cases: one in which the etiological factor has been some destructive process, and the other where neither the history of the case nor the local appearances afford any such explanation.

Quite a number of authors have considered this second class as of congenital origin, but the argument advanced in support of this view is not entirely sound. The fact that there has been no knowledge on the part of the patient of the previous existence of any faucial lesion is suggestive, but not conclusive. On the other hand, the argument is supported by the symmetrical situations of the lesions and the absence of cicatricial tissue.

*Paper read before the Section in Laryngology, New York Academy of Medicine, Jan. 24th, 1897.

The first case reported by Wolters, in 1857, occurred in an adult male. Both anterior pillars presented an hiatus. The literature of the subject is then a blank until 1878, when a second case of symmetrical defects in the anterior pillars was reported by J. Solis-Cohen, the patient being a man of forty years. Cohen suggested that the condition was essentially a separate investment by the pharyngeal mucosa of the palato-glossus muscles, though offering no suggestion as to the cause of the defect. He adds that caution should be exercised in not confounding such absence of tissue with the results of previous ulceration.

A third case, though perhaps not strictly belonging to this category, was published in 1883 by Parker, who reported a large gap in the posterior pillar of the left side, occurring in a young woman of twenty-one. In this case there was the history of a severe cold, followed by left-sided tonsillar abscess. As a result of subsequent sloughing the palato-pharyngeus muscle was dissected up from the walls of the pharynx and detached from its site of insertion, so that while its upper end remained normal its lower end became adherent to the pharyngeal wall. The muscle, as a whole, bulged forward like a piece of tense ribbon, drawing the whole palate slightly toward the right side. A plastic operation restored the parts to their normal symmetry.

Since 1883 the record of cases has increased in frequency, the reporters, including in this country Claiborne, Hamilton, Schapringer, Toeplitz, and Lefferts; and in England, Fowler, Mourice, and Fullerton. In all, forty-two cases have been published, including three to be hereinafter alluded to; but of this number only thirty-one are given with sufficient detail to use for purposes of comparison. Of these thirty-one, twenty-five showed defects in one or both anterior pillars, and six in one or both posteriors. The defect was anterior bilateral in thirteen, anterior right seven, anterior left three, posterior bilateral one, posterior right one, posterior left four, anterior (but side not stated) two.

The sex is stated in twenty-seven: sixteen were in males, and eleven in females.

The age of the patients does not have any special significance, but it is noteworthy that, out of twenty-five instances in which it is given, sixteen were in the third decade of life.

My own cases are briefly as follows:

Case 1.—Woman, 35. Specific disease, gummy deposits in both anterior pillars, with subsequent tissue destruction, leaving both palato-glossus muscles distinctly isolated. The whole process took place while the case was under observation.

CASE 2.—Girl, 22. Oval perforations in the upper part of both anterior pillars (See Fig.). No history of preceding faucial trouble.

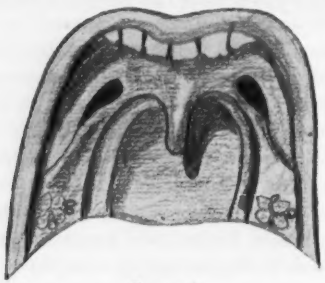

FIGURE 1.

This patient was seen through the courtesy of Dr. G. A. Dixon, a colleague at the Demilt Dispensary, she having come to his class in general medicine for dyspepsia, and the palatal defects having been discovered during the doctor's examination.

CASE 3.—Man, 28. With a small round opening through the left anterior pillar. No history of preceding faucial trouble, or knowledge on the part of the patient that he had such a physical peculiarity.

It is natural to ask if this lesion occurring in the posterior pillars causes any difficulty in swallowing from an incomplete shutting-off, by the soft palate, of the naso-pharynx? In reply, it may be said that no such difficulty has been reported. Chiari says that specific disease leading to such a lesion would probably cause adhesions also, and possibly loss of tissue from ulceration; but this is not inevitable, as Case 1, above noted, clearly shows. Toeplitz states that specific cases would be more likely to show difficulty in swallowing. This view is upheld by Seifert in contrasting supposed congenital with manifestly acquired cases.

Fowler, who has seen at least four cases of palatal defects, maintains that in all such a history of previous scarlatinal angina, or recurrent quinsies, can be elicited, and that close inspection will always reveal the existence of scar tissue. It is easy to see how an abscess in or about the pillars could burst through the latter, though such perforations quickly close up as a rule; but Mourice saw three such cases actually happen in diphtheria associated with scarlatina. The edges of the openings were clean cut, as in gastric ulcer, and there was no attempt at repair. There is, however, a group of cases in which the symmetry, shape, and site of the lesion render any such explanation extremely improbable, to say the least.

In reporting six cases, Boucheron gives us no particulars, except to say that in all lymphoid hypertrophy in the pharyngeal vault was found. He advances the rather absurd theory that the lymphoid masses prevented the proper development of the posterior part of the musculature of the soft palate. He even suggests that the loss of substance may be looked upon as a "stigma" of defective development, but wisely does not attach much importance to this point, especially if the nervous system is in a normal condition.

In one case Schapringer noted a furrow on the upper lip, running down from the nostril toward, but not quite reaching, the muco-cutaneous junction. He suggests that there may have existed an intra-uterine hare-lip, cured before birth.

In a case reported by Postumus Meijes there was a small fibroma on each side of the uvula.

A point of considerable interest is the rudimentary condition of the tonsils frequently found in these cases. Fowler believes this to be the rule. In one of his cases with almost complete absence of the faucial tonsils there was a broad band of lymphoid tissue, suggesting, he says, compensatory hypertrophy, extending across the tongue, apparently anterior (from his description) to the lingual tonsil. It has been pointed out, however, that rudimentary tonsils are frequently found in persons with normal pillars. In one instance Claiborne found a supernumerary tonsil.

All of these cases are, in the main, free from any symptoms; where the tonsils have been wanting there has sometimes been a pocketing of soft foods between the pillars. Most of the cases have come to light during routine examinations of patients who were in no wise suffering from any symptoms referable to the fauces.

The main interest centers about the mode of origin of these tissue gaps in those cases where we can exclude antecedent syphilitic and other destructive processes. In the first place, it may be noted that such gaps may be found in other parts of the body, as the diaphragm, where there is a musculo-membranous structure similar to that of the soft palate. That variety of hymen known as the "cribriform" has been adduced as another illustration of the same fact. It is easy to assume here that we have in this faucial defect a developmental error; but this is only a working hypothesis. We do not know the exact mode of development of the faucial pillars. Testut, the French anatomist, is inclined to believe that these perforations ought to be considered, not as normal depressions, unobliterated during fœtal life, but rather as an embryonic absorption of fœtal tissue previously formed. Nothing analogous to these gaps has

ever been found in the lower orders of animal life. Broeckaert suggests that they may be analogous to the partial persistence of the pharyngeal clefts which are sometimes met with in the form of fistulæ, more or less complete, and situated toward the bottom of the lateral walls of the pharynx.

Furthermore, it has been suggested that the gaps may have some relation to bronchial fistulæ; but, as Toeplitz has remarked, their location makes such a relation quite improbable. Moreover, rudimentary tonsils have no necessary relation to intra-uterine development, and the mere fact of symmetry is not a conclusive proof of congenital origin.

There have thus been placed before you the various theories which are extant as to the cause of this condition. It may be that its frequency has been under-estimated, and that it occurs far oftener than the small number of cases on record would lead one to suppose. Light may be shed upon this question, as those present may discuss the matter from the standpoint of personal experience.

NOTE.—Since the foregoing paper was written, Dr. N. L. Wilson, of Elizabeth, N. J., has kindly forwarded me notes of a case which is, he writes, the only one which has come under his notice in thirteen years of special work. His patient was a woman of 67, who, ever since an attack of scarlatina in her third year, had suffered from nose bleed and chronic aural catarrh. The perforation was located in both anterior pillars. The patient had no trouble from the condition, and, in fact, was unaware of its existence.

My attention has also been called by Dr. F. J. Brockway to a statement in the last edition of Quain's Anatomy to the effect that these defects in the faucial pillars are now generally regarded as due to incomplete obliteration of the original branchial clefts.

No. 118 West 69th Street.

Dr. Macnaughton Jones

Reports finding a sprouting hayseed in the meatus of a patient whom he was treating for deafness of the middle ear.—*Am. Medico-Surg. Bulletin.*

Dr. S. C. Stanton

Has been chosen to succeed Dr. Kiernan as editor of the *Medical Standard*, of Chicago.

THE EVOLUTION OF THE BUTTLES INHALER.

BY EDWIN PYNCHON M.D., CHICAGO, ILL.

Professor of Rhino-Laryngology and Otology, Chicago Eye, Ear, Nose and Throat College; Professor of Diseases of the Nose and Throat, Jenner Medical College.

Both pleasure and profit may often be derived from looking up the history of some familiar implement of trade, which we will thereby learn has, through evolution, materially changed in form, and mayhap also in use, when compared with its earlier prototypes. In all American surgical instrument catalogues, for the past quarter of a century or more, the Buttles inhaler will be found quoted, and generally illustrated, though the illustrations have from time to time varied.

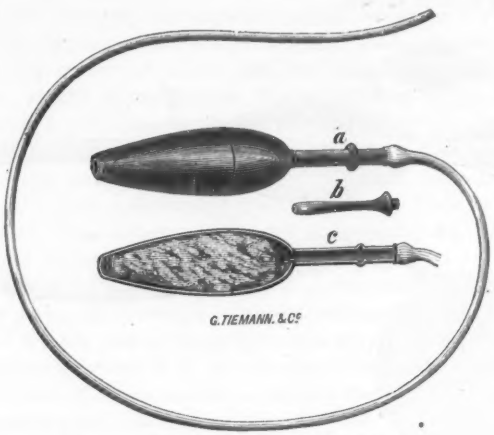

FIGURE 1. The Original Buttles Inhaler (½ Size.)

As originally designed by Dr. M. S. Buttles* it was evidently intended that for inflation it was to be operated by either the patient or physician blowing through the rubber tube. The small tip *b* was designed for use with infants, when a short piece of soft rubber tubing was to be slipped over it and the free end introduced into the child's nose. While the open end of *a* was designed for the adult nose, the instrument, when used as an inhaler, was often held in the mouth.

*N. Y. Med. Record, March 15th, 1866; page 44.

Shortly thereafter this device was modified by Dr. D. B. St. John Roosa, who added a bean-shaped nose-piece with several small openings and also a compression hand ball.

FIGURE 2. Roosa's Eustachian Dilator (½ Size).

It next appeared in the form shown in figure 3, the small piece *f* having been added for use with the Eustachian catheter. Strange to say, this style remained practically unchanged for a score of years. It is made of hard rubber.

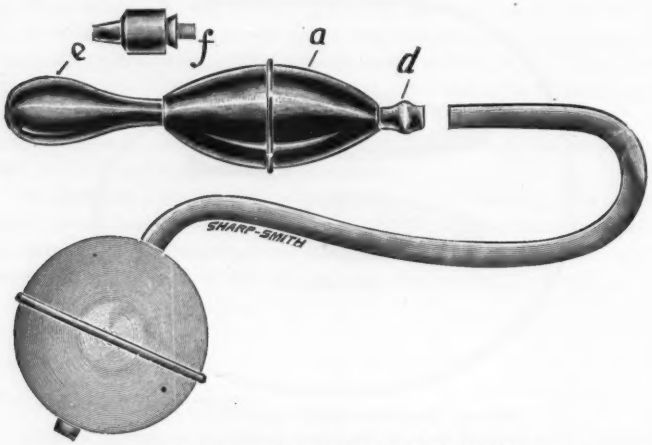

FIGURE 3. Common Form of Buttles' Inhaler (½ Size).

Formerly compressed air devices were not in general use, and sprays and their analogues were operated by compression bulbs, which in those days were more desirable than now, as patients were then more often treated at their homes, the special office practice of recent times being comparatively unknown. With the advent of the compressed air apparatus, a desire was manifested to use the Buttles inhaler by attaching it to the cut-off, which was done by somewhat enlarging the

hole in the tube-nipple *d;* but this, as generally made, was too slender to allow of the hole therein being sufficiently enlarged without impairing its strength, and, at best, the result was unsatisfactory, as the device was thus awkward to handle.

Dr. Seth Scott Bishop, in appreciation of this trouble, suggested an improvement, both efficient and practical, and it was to supplant the tube-nipple with an expanded collar, so that the cut-off would tightly fit into a conical hole therein.

FIGURE 4. Dr. Bishop's Inflater (½-size).

When thus attached the expanded collar serves as a convenient handle whereby the operator can securely hold the instrument, in combination with the cut-off, in one hand, and thus leave the other hand free; but, as will be readily seen, the substitution of the collar, *g*, for the tube-nipple, *d*, spoils the instrument for use with a hand bulb, and necessitates the practitioner having one inflater of each kind, if he desires ever to use the instrument except with the cut-off. The writer, while fully appreciating the value of Dr. Bishop's improvement, noted other defects which called for attention. The most troublesome feature in its use was in making the change from *e* to *f*, which required the unscrewing of one piece followed by the screwing on of the other, which change requires a half-minute's time. To remedy this I had the part *e* changed so that an enlarged hole in same would slip over the end of *f*. In this way *f* is not removed, and to put on or take off *e* requires only a second's time.

In the next place, the shape of the nose-piece *e* was often found to be unsatisfactory; and, as an improvement in its place, I have substituted an acorn-shaped piece (*h*, fig. 5) which has proven to be a perfect fit in every case in which it has been used—never slipping in too far to be effective, as was the frequent fault of its predecessor. I also added a small hard rubber union, *i*, such as is supplied with the Davidson No. 65 spray-bottles, which, when desired, can be left attached to the tube of a hand ball ready for use when called away from the office. If, on the other hand, its use is not required, it can be left permanently, with the sponge, inside the chamber, *a*, without harm, and being thus in its place can always be quickly found when wanted.

The best packing to place inside the medicine-chamber, to hold the medicament, is sponge of strong texture, in one piece, large enough to loosely fill the cavity. Cotton is not desirable for this purpose, and may prove to be very objectionable as, for example, when disintegrated by iodine, in which case its use becomes positively dangerous.

I furthermore observed that the outlet hole was usually made too small; so I have had it materially enlarged, as in successful Politzerization the volume of air driven in is of as much importance as is the pressure employed; and here let me add *en passant* that while Politzerization in this way is easily done with children, particularly if they assist by crying, it is often not so easily done with adults. Failure is frequently met with when the patient is directed to swallow water or say "hick" or some other word which is the favorite of the operator. I have had the most uniform success by directing the patient to cough, and therefore rarely am compelled to use the Eustachian catheter. Either ear can be inflated at will by tightly closing the external opening of the other ear.

FIGURE 5. Author's Modification (½ size).

The ear specialist will find it convenient to be supplied with several of these inflators charged with different medicines, as his practice requires. In this case he can have them numbered (see fig. 5) so as to be able to easily select the one wanted. It is also not amiss to have one of the set made of metal in which chloroform or any other remedy which would be injurious to rubber can be used, and it may also, if desired, be heated. The expanded collar, *g*, in addition to its being a handle, serves also as a pedestal upon which the inhaler can be set so as to prevent its rolling off the treatment desk. Furthermore, being funnel-shaped, a few drops of the required medicine can at any time be dropped through the opening onto the sponge, thus recharging without having the trouble each time to unscrew or open the medicine-chamber.

By removing this tip, *e*, and holding this instrument between the lips, it can be used with a continuous fifty-pound pressure as an inhaler,

when indicated, for the administration of the so-called impaction treatment*. While no nebula is produced, the air entering becomes impregnated with the volatile medicament used, and in practice the results are beneficial.

After the free use of a medicated albolene spray, this instrument can be used as an inhaler, so that with suitably medicated air the oily spray first used may be forced to the deeper nasal recesses and thus be of particular value when any of the accessory sinuses are affected. In such case a twenty-pound pressure used intermittingly would be sufficient. Both nares may be alternately thus treated; the opposite one each time being closed, and the patient meantime inhaling. In this way no middle-ear inflation will occur.

In the treatment of chronic non-suppurative middle-ear trouble, this process can be varied as follows: After freely spraying the nares with a bland, oily spray, as a three-per-cent. camphor-menthol solution in liquid albolene, follow by Politzerization. Some of the oily fluid will be forced through the Eustachian canal into the middle-ear and prove beneficial. The danger of inflation after the use of an aqueous douche or spray is well known; hence, no watery solution should be employed prior to this method of treatment.

When this inflator is used with the Eustachian catheter, a low pressure of from 8 to 15 pounds is sufficient, and the continuous stream of air thus secured often gives far better results than are to be had by the intermitting compressions of a hand bag, particularly if any degree of acute inflammation be present. When used with a catheter the tip, *f*, should be extended with a short piece of soft rubber tubing. To secure the different degrees of pressure mentioned, an auxiliary air-tank is desirable.

In acute coryza, medicated air will prove very efficacious, owing to its power of penetration. The following formula might be suggested:

℞ Guaiacol (Merck),
Ol. Pine Needles ..... āā ʒi.
Camphor-Menthol ..... ʒii.
Ol. Eucalyptus (Saunders) ..... ℥ss.
M.

Moisten the sponge with 10 or 15 drops, and use by inhalation as previously described. Results quite as satisfactory will be had as are claimed for any of the popularly advertised menthol or "Kangaroo" inhalers.

Columbus Memorial Building.

Jour. Am. Med. Ass'n., May 12th, 1894, page 702.

FURUNCULOSIS OF EXTERNAL AUDITORY MEATUS FOLLOWED BY SUPPURATIVE OTITIS MEDIA WITH MASTOID INVOLVEMENT AND OPERATION.*

BY M. D. LEDERMAN, M.D.

Lecturer on Diseases of the Nose and Throat, New York Polyclinic; Attending Aural Surgeon, University Medical College Dispensary; Assistant Aural Surgeon, Manhattan Eye and Ear Hospital, Etc., Etc.

Although in text-books on otology attention is called to the possible extension of a follicular inflammation of the external canal to deeper structures, the actual occurrence of such a complication is so rare, that I take this opportunity of contributing the history of a case exhibiting these features.

Furuncle of the auditory canal, though generally a disease of short duration, is probably as painful as any ailment affecting this region. Fortunately, the period of its activity may be curtailed by decisive measures; and though at times such methods are rejected by the timid sufferer, the sudden rupture of the furuncle affords relief. This sometimes occurs when the inflammatory process is limited to the superficial tissue. If, however, the deeper layers of the skin become attacked, days of intense suffering are experienced, and extension of the infection may reach the middle chamber and neighboring structures.

Constitutional predisposition is a reasonable and convenient theory to account for the presence of this condition in certain individuals. The tendency of furunculosis to recur in the same person, certainly strengthens this presumption. You must also consider the importance of trophic disturbances, as a factor in giving rise to similar lesions, as pointed out by Urbantschitch. Diabetics are subject to crops of these boils, but their areas of circumscribed inflammations are not limited to the auditory orifices, but are rather general in character. It has been further noticed, that during an attack of furunculosis in an otherwise healthy person, sugar has sometimes appeared in the urine, but vanished after the termination of the superficial disturbance.

The class of cases which comes under the aurist's care is generally of a local character, caused by infection through a break in the continuity of the epithelial layer. This may follow mechanical interference, in the form of forcible manipulations. The infection gradually attacks the hair follicle, and by boring deeper may give rise to a pronounced cellulitis. The latter more frequently takes place in parts of the body where the underlying fascia is generously supplied.

*Read before The Harlem Medical Association, February 3d, 1897.

Extensive suppuration with necrosis may result in such instances. In the auditory canal, perichondritis and periostitis may follow this apparently simple affection.

Kirchner has discovered the staphylococcus pyogenes aureus in the pus of furuncles, and has produced abscesses in animals by inoculating them with the cultivated products. Even though the skin is sound, infection may occur if the fluid containing this micro-organism be applied to the part with friction. The successive appearance of these boils in the meatus tends to show the active properties of this bacillus, and though the infection may have attacked different follicles at the same time, the return of the disease emphasizes the importance of prophylactic and antiseptic treatment.

Little need be said regarding the symptomatology of this trouble. Local pain and tenderness will promptly direct the attention of the adult to the part affected. When deep seated, the pain is apt to assume a pulsating character. On examination in such cases, the furuncle is flat and not definitely outlined. In a superficial manifestation, the swelling is sharply defined, and quite red in color. The temperature is usually but slightly elevated, but in children it may rise quite high, and is sometimes accompanied by delirium, resembling meningitis. The latter must not be forgotten as a possible complication. Traction upon the auricle will sometimes aid us in differentiating between external otitis and middle ear disease. In the former the hearing gradually becomes worse, while in the latter the deafness is present from the onset. Pain may be experienced over the side of the face and down the neck. When the collection of pus is deep seated, the membrana typani may become inflamed, and being forced inwards may give rise to marked tinnitus, on account of the increase of labyrynthine pressure. This symptom soon disappears after the furuncle is opened. When the upper wall of the canal is attacked the disease is more severe on account of the multiplicity and larger size of the vessels in this vicinity. The tympano-squamous fissure also favors the spread of the inflammatory process. In arriving at a diagnosis we must not overlook the possible presence of a parotid abscess. If such should exist, pressure upon the parotid would increase the swelling in the canal. Frequently, the rapid closure of the meatus prevents an inspection of the drum-head, so that we cannot positively state whether a suppurative otitis media exists, unless same has preceded and is the cause of the furuncle. If such a state of affairs should be present, drainage would be retarded, and mastoid involvement must necessarily be anticipated, if the external swelling does not rapidly subside. Such was the difficulty in my case. We must

furthermore remember the possibility of a dissecting abscess, arising from a suppurative otitis media; or a bulging of the posterior wall of the canal, from a periostitis or mastoid disease.

Before detailing the history of my case, a word or two in reference to the treatment of furuncle of this region may not be considered superfluous. Bearing in mind the limited space any swelling of the soft parts of the meatus may occupy, before encroaching upon sensitive structures, it is evident that the principal cause of the patient's discomfort is due to increased tension within a constricted osseous cavity. If the disease has reached an advanced stage, local medication has but little effect upon the agonizing pain. Here nothing short of the prompt and energetic use of the knife will offer the desired amelioration. In the initial period, dry heat may prove of considerable benefit in allaying the suffering. If seen early, topical applications of tincture of iodine carefully applied, or solutions of silver 4 per cent. to 12 per cent., may assist in aborting the attack. Gruber claims excellent results from the introduction of gelatine bougies, each containing one-sixth of a grain of the extract of opium. These he employs when the patient objects to the use of cutting instrument. Ichthyol has been used by some in the form of an ointment, the strength varying from 5 per cent. to the pure drug. When we recall that this medicament owes its therapeutic activity to the 28 per cent. of iodine which it contains, it seems plausible that applications of this remedy may prove beneficial.

For a considerable period I have employed boro-glyceride introduced into the meatus on cotton tampons, and have found it a pleasant and serviceable medication. It is merely boracic acid and glycerine heated together, and then added to an equal quantity of glycerine. This substance is an active and harmless antiseptic. On being added to milk and food it retards putrefaction and acts as a preservative. Its therapeutic value is no doubt enhanced by the hygroscopic property which it possesses. Carbolic acid, atropin and morphin combine with it readily. With the assistance of heat, menthol can be added to it; but on cooling the menthol rapidly appears upon the surface, and the patient, if not cautioned to heat the mixture before applying the same to his sensitive ear, may experience an unpleasant and intense burning. The only objection which can be offered to boro-glyceride is that it is a proprietary article.

Expectant methods must not be prolonged if speedy relief is not effected. It has been customary to cut down upon the furuncle, but I have found quicker relief by transfixing the swelling with a small tenotomy or a Graefe knife, and cutting from within outwards, as sug-

gested by McBride. The patient is apt to jerk the head away at the first impression of the instrument, so that we do not cut as deeply as is necessary with the former method. Following the incision, antiseptic precautions should be observed. A plug of dry iodoform or bi-chloride gauze, moistened with the boro-glyceride, can be introduced into the canal and changed in three or four hours. Another method of cleansing is to instil a saturated solution of boracic acid in alcohol. This naturally smarts for a few moments, and at times cannot be borne by the patient. The solution may be made a watery one instead.

When a tendency to recurrence exists, the alcoholic solution is very serviceable. Unguentum hydrarg. nit., in the proportion of one drachm to the ounce, is said to act satisfactorily in such instances. In all cases of furunculosis, internal alterative medication, together with proper attention to the alimentary tract, is an important element in bringing about a normal state of affairs. Lowered vitality naturally weakens tissue-resistance, and so more easily permits the invasion of adjoining structures by an infectious process. This truism is practically portrayed in the case which I herewith report:

Mrs. X., 29 years of age, presented herself for treatment, complaining of severe pain in the left ear for the last few days. Two weeks ago, before she came to me, she had a boil in the scaphoid fossa, which was lanced by the attending aurist, and soon got well. Some cerumen was at that time found in the canal, and some was removed after annoying manipulation to the patient. From that time more or less pain has been experienced, and the parts were exquisitely tender at the time of my examination. Three months previous to her aural troubles, Mrs. X. had undergone three rather severe operations under one etherization, which consisted of an anchoring for floating kidney, curetting the uterus, and the radical operation for a femoral hernia. She recovered nicely from the surgical treatment, and journeyed south for a change of scenery. Her general condition when I saw her was below par, and her appearance showed the effect of her recent troubles.

On examining the ear I found a circumscribed swelling on the anterior wall of the canal, with some tumefaction of the tragus, which was quite painful to pressure. No evidence of deeper disease was observed. The furuncle was incised, after washing out the canal with a solution of borolyptol. The incision gave immediate relief, and boroglyceride was prescribed. Fowler's solution, together with the rhubarb and soda mixture, was given internally. Three days later another boil appeared on the upper wall of the meatus, with pain referred to the mastoid. This furuncle was opened, and antiseptic douching was carried out every two hours. Tampons of boro-glyceride were introduced

during the interim. The canal was almost entirely closed on account of the swelling of the soft parts, but this receded sufficiently to allow of an inspection of the drum. This membrane was found congested, but did not show further symptoms of middle ear involvement until November 14th, when a little pus was seen on the postero-inferior quadrant. The douching was continued, and, as the pain on pressure over the mastoid still existed, the ice coil was applied. No elevation of temperature up to this time. The tumefaction of the canal increased, so that no examination of the deeper portions of the canal could be made. As drainage was obstructed, and as the temperature arose to 99⅖° F., with some increase in the mastoid swelling, I informed the patient that, in my judgment, an operation was indicated. She declined to have same performed as she was feeling fairly well, and thought that "Nature would come to her aid." She caused considerable annoyance on account of her peculiar eratic disposition, but on November 18th she felt that the swelling over the mastoid had still further increased, and when she noticed how prominently the auricle stood away from the head, on looking into the mirror, she decided to abide by my judgment.

The usual Schwartz operation was performed. The soft parts were very much congested. Over the antrum the bone revealed the shaven-beard appearance, and I attacked this region with the chisel. No pus was observed, but granulation tissue was found in the antrum, which was removed with the curette, followed by rather free bleeding. The wound was dressed in the customary manner, the upper half being closed with sutures. Two days after the operation the swelling in the canal had almost disappeared. The patient made an uninterrupted recovery, with the exception of some tinnitus, which lasted about two months, but disappeared under inflation and massage. The temperature never reached above 99.8° F.

128 East 60th Street.

Dr. Charles M. Robertson,

Of Davenport, Iowa, formerly Lecturer on Laryngology and Rhinology, Medical Department of the State University of Iowa, has been elected to the Professorship of Laryngology, Rhinology and Otology.

CONTRIBUTION TO THE TREATMENT OF DEAF-MUTISM BY OPERATION FOR ADENOID VEGETATIONS.

BY DR. JOHN SENDZIAK, WARSAW, POLAND.

Much attention has recently been directed to a consideration of the relation of deaf-mutism to the so-called adenoid vegetations of the naso-pharynx (post-nasal growths).

The investigations of various authors in different countries have been carried out, and the same conclusions reached in each instance, namely, that these post-nasal growths are met with much more frequently in deaf-mutes than in healthy children.

Lemcke[1] reports adenoid vegetations occurring in 50 per cent. of deaf-mutes examined; Wisblewski[2] of Poland, 57.5 per cent.; Piesson[3], more than 50 per cent.; Frankenberger[4], 59.49 per cent.; Aldrich (cited by Frankenberger) gives the largest percentage at 73 per cent.

Thus we note the frequency with which adenoid vegetations are present in deaf-mutes. This fact is still more striking when we draw attention to the relatively very small percentage of this affection in quite healthy children.

In these investigations there also appears to be a concensus of opinions. Meyer, the father of adenoid vegetations, notes that scarcely 1 per cent. of healthy children are so affected; Doyer (cited by Frankenberger) gives 5 per cent.; Schmiegelow, 5 per cent. of greater and 15 per cent. of lesser degree; Wisblewski, 7 per cent.; Kafermann, 9 per cent.

What an enormous difference between these two sets of figures! Is it possible to conclude from a consideration of these statistics that this is a mere coincidence? In my opinion it is not.

From a general point of view, it is reasonable to suppose that the child born with adenoid vegetations, or acquiring them in the early years, is usually deaf, or, not being able to hear, soon forgets speech.

Of cases observed with adenoid vegetations at birth, I cite Thost and E. Fraenkel; Jawarski, of Poland, reports the case of a child 9 years old, born with adenoid vegetations; I also have seen several such cases in the new-born.

The cause of deafness is either a mechanical obstruction of the Eustachian tube (ostium pharyngeum tubæ), or the result of inflammatory processes in the middle ear. This is again substantiated by statistics.

Halbeis[5] gives 53 per cent., Meyer 74.8 per cent., and Hartman 74.18 per cent. of post-nasal growths observed in the deaf.

Practical observations prove the correctness of these theoretical conclusions. Thus, cases may be cited where the extirpation of adenoid vegetations in deaf-mutes has resulted in the restoration of hearing.

Two such cases are reported by Arslan, one by Conétoux (cited by Helme[6]). I also had occasion, recently, to observe and treat such a case, with good results.

G., 5 years of age, was referred to me for treatment of deafness. The case was one of congenital deaf-mutism; a 20-year-old brother of the patient is also a deaf-mute (congenital); a sister, also congenitally deaf, died when 4 years old; two other sisters are living, with speech and hearing normal; the oldest brother was born with closed rectum, and died before operative interference could be instituted.

By careful examination, I convinced myself that the child did not hear or speak at all; his utterances were of a scarcely intelligible, stuttering form. The boy was physically quite well developed. Palpation of the naso-pharyngeal cavity revealed the presence of enormous quantities of adenoid vegetations. Inspection of the ears showed a retraction of both tympani. No other changes were noted.

The child snored heavily when asleep, was a typical mouth-breather, and was subject to frequent colds, coughs, etc.; he lacked completely the power of concentrating attention on a definite subject or object.

On the strength of this status of affairs, I advised an operation, without promising, however, an absolutely favorable result. With the assistance of my colleague, Dr. Zielinski, who administered the anæsthetic (chloroform) to "semi-narcose," I performed an operation for the removal of the adenoid growths by means of Jurasz forceps and Gottstein curette; in addition, I employed my fore-finger, wrapped with iodoform gauze soaked in 1 to 1,000 hydrarg-bichlorid., to remove the remnants of the growths, and at the same time to thoroughly disinfect the operated field in the naso-pharynx.

The post-operation treatment was favorably carried out; there were no complications.

Three months later the boy was brought to me, and the mother joyfully announced that, immediately after the operation, the hearing improved, and the child began to pronounce and articulate more distinctly, first single words, then sentences.

Six months later I had occasion to see the patient again. According to the mother's account, the improvement of the hearing and speech continued gradually. Especial stress is to be laid on the remarkable intellectual development which followed the operation; the physical development of the child was also considerably increased.

I report another similar case of a boy, 4 years old, congenital deaf-mute, from whom I removed a large accumulation of adenoid growths, under chloroform. The result immediately following the operation was very satisfactory; the hearing improved, and the child began to speak some words. Unfortunately, further data of this case are wanting.

The result of these observations, and the progress noted after the removal of adenoid vegetations in deaf-mutes, strengthens us in the conclusion that such operative interference is of prime importance, and should be advocated wherever possible.

Even if the results are only partially successful, it does not exclude the adoption of other methods usually employed, such as teaching speech, etc.

The early operation for the removal of adenoid vegetations is advised by many, where general weakness of the child is not a contra-indication, and the operation is sometimes performed on infants but a few months old. The development of deafness can thus be avoided.

In my opinion, the prophylactic measure, which such an operation implies, is of paramount importance, and I feel that the question should receive more careful consideration.

BIBLIOGRAPHY.

1. Lemcke, *Die Taubstummheit im Grossherzogthum, Mecklenburg-Schwerin: Ihre Ursache und ihre Verhütung*, Leipzig, 1892.

2. Wisblewski, *Przegtad Sekarski*, 1891, No. 23-24.

3. Peisson, *These de Paris*, 1893.

4. Frankenberger, *Adenoide Vegetationen bei Taubstummen, nebst einigen Bemerkungen über die Statistique der Taubstummheit. Monatsch. f. Ohrenh*, 1896.

5. Halbeis, *Die Adenoide Vegetationen des Nasenrachenraumes*, 1892.

6. Helme, *Traitement des Vegetations Adenoids. Bull. et. mem. de la Soc. franc. d'otol., de laryng., et de rhin.*, 1596, xii., p. 80.

Surgical Treatment of Deafness.

When deafness is due wholly or principally to some disturbance in the transmitting apparatus, it can be cured by an operation, according to Garnault, consisting of the excision of the tympanum, ablation of the hammer and incus, and moblization or extraction of the stapes, performed through the mastoid. Rinne's test allows the cases that would be benefitted by the operation to be distinguished from those that would not. Garnault states that every case of the kind in which the cranial perception of the diapason is superior to the ærial perception, should be operated.—*Bulletin de l'Acad. de Méd.*, December 29; *Jl. Am. Med. Ass'n.* S. S. B.

CLINICAL REPORTS.

TWO CASES OF ABSCESS OF THE NASAL SEPTUM.

BY E. C. ELLETT, M.D.

Ophthalmic and Aural Surgeon to St. Joseph's Hospital; Ophthalmic and Aural Surgeon to the Children's Home, Memphis, Tenn.

In Kicer's article on "Hæmatoma of the Nose," in THE LARYNGOSCOPE for February, 1897, he mentions that this condition may occur spontaneously as hæmatoma auris does, but is usually traumatic. "The contents of the hæmatoma may vary; most frequently a suppuration will follow shortly after the tumor develops, so that when the case is presented for treatment a more or less developed abscess may be found. This may mislead us in the diagnosis, but the history of the case and the traumatic ætiology confirms these conclusions of hæmatoma."

When that paragraph came to my notice, I was in doubt whether the two cases which I here present were abscesses *ab initio*, or suppurating hæmatoma. My reasons for arriving at the former conclusion will be mentioned:

CASE 1. A boy of sixteen, son of a physician, was brought to me by his father, with the following history: One week before he had, in falling, struck his nose on a fence. The next day he had fever, lasting four days, and going as high as 103°. On the second day after the accident, the day following the rise of temperature, he found nasal respiration impossible. There was not, nor had there been, any nasal discharge. I found both sides of the septum bulging, occluding nares. The swellings fluctuated, but were not tender. The exploring needle showed pus, and I opened the left side of the septum, under cocaine, evacuating a good deal of pus. I irrigated the cavity, and passed in a thin strip of gauze. The swelling was sharply limited behind by the bony septum. The next day he breathed through his nose (both sides), and on the third day after the little operation I omitted the strip of gauze. He has had no subsequent trouble.

The occurrence of fever before the swelling was noticeable, and is the principal point on which I rest the diagnosis of abscess and not suppurating hæmatoma in this case. The pathological explanation is the theory of *locus minoris resistentiæ*.

CASE 2. Was a woman, æt. 24, from Tunica, Miss., who gave the following history: Three weeks before coming to me she had facial

erysipelas. The nose and left side of face were swollen, and during the disease her nose became obstructed. In a few days there was a free spontaneous discharge from the nose, which became open. She did not know what the character of the discharge was. The nose promptly stopped up again, and remained so until I saw her. A swelling, sharply limited to the cartilaginous septum, occluded both nares. It fluctuated, and the exploring needle showed a thick, viscid fluid. With the help of cocaine anæsthesia I opened the septal swelling on the right side, and evacuated a fluid, at first thick and clear, but pusiform towards the last. I packed the cavity after irrigating, as I did in the other case. The next day both nostrils were open. The discharge was purulent, but lessened in amount from day to day. One week after I opened the abscess she had to go home, and as there was still some discharge I put a lead style in the opening, bent so as to be self-retaining, and directed her how to take this out and shorten it daily. A month later I saw her for the last time. She got rid of the style in a week, and has had no trouble. The septum is thickened symmetrically at the site of the abscess, and the bridge of the nose is depressed at the union of the bony and cartilaginous portions.

In this case I think the abscess was from infection by the streptococcus of erysipelas. Of Kicer's thirteen cases one was spontaneous, as my second one was. I may be mistaken in thinking these were not hæmatoma, but from the reasons given it seems more probable that they were abscesses.

In Burnett's "System of Diseases of the Ear, Nose and Throat," Jarvis dismisses hæmatoma and abscess of septum in a line and a half. While the diagnosis from the history and the presence of a (usually) bilateral, anterior septal swelling, sessile and fluctuating, is easy, and the treatment is simple, the most pretentious modern work has slighted a subject of at least some importance.

Dr. Fayette C. Ewing,

Of the staff, has been appointed Surgeon in charge of the Out-door Department for the Nose, Throat and Ear, at the Baptist Sanitarium of St. Louis.

Dr. W. H. Poole,

Of Detroit, has moved his office to the Cullen-Browne Building, 270 Woodward Avenue.

EXCISION OF MEMBRANA TYMPANI AND MALLEUS FOR ATTIC DISEASES.

BY B. F. BUTLER, M.D., LONDON, CANADA.

Miss J. M. came to me on January 18th, 1896, for treatment of the left ear, although I had seen her some months previously, and had prescribed for her, the treatment being carried out at home by herself.

She stated that she had suffered from an offensive discharge from the left ear for nine years, dating from an attack of scarlet fever. The discharge was usually slight in amount, but very offensive, and at periods had apparently ceased altogether. She had been subject to attacks of giddiness, especially when stooping; and her general health had been much reduced.

Examination of the ear revealed a perforation of the central portion of the membrana flaccida, blocked by granulation tissue. The membrana tensa was intact. There was considerable nasal stenosis on both sides from hypertrophy of lower portion of septum and inferior turbinates. Eustachian tubes pervious. Hearing in affected ear, for watch, on contact. The nasal stenosis was relieved by means of the electric cautery; and the granulation tissue in the perforation of drum-head was removed by a chromic acid bead, when the neck of the malleus was exposed.

The attic space was frequently cleansed with peroxide of hydrogen and a solution of carbolic acid, by means of the tympanic syringe. Syrup of the iodide of iron was administered. This treatment was continued until April 7th, 1896; but still there was a slight discharge. The patient was then put under chloroform by Dr. McCallum, of London, when the drum-head and malleus were removed under illumination by the electric forehead lamp. The incus could not be found; and the malleus was intact except a carious spot on the articular surface of its head.

Examination with the probe failed to detect any diseased spot in the roof of the tympanum. The operation was somewhat tedious, on account of the hemorrhage obscuring the view? More likely due to a lack of skill on the part of the operator, as I was a novice in this particular department of surgery.

The ear was lightly packed with an iodoform tampon, which treatment was continued for two days; and then an antiseptic solution was used.

The patient was about on the day following the operation, although there was marked vertigo upon assuming the upright position, which disappeared on the second day. In one week the hearing distance for

the watch had increased to six inches; but has not improved from that up to the present time. The important thing, as in all surgical cases, is the result; and I must confess that it has not been so brilliant as some surgeons have been able to report. At the present time, February, 1897, there is a slight discharge of a mucoid appearance; but it has lost its offensive nature. The promontory is dry and pale. All vertigo has disappeared, and the general health is good. Although the result of the operation has not so far been quite satisfactory in every particular, yet I feel confident that the cure will eventually be complete. Probably a little further treatment by me immediately after the operation would have accomplished something better; and it is quite possible that there was some diseased spot in the walls of the middle ear, which escaped detection.

Quinine and Atropine.

M. Aubert (*Lyon Médicale*) calls attention to the fact that employment of atropine in connection with quinine will greatly lessen or prevent the disagreeable tinnitus so often caused by this drug. He combined 0.007 of a grain of atropine with five to eight grains of quinine.

Artificial Membrana Tympani.

Dr. Gomez (*New Polyclinic*) recommends discs of blotting paper, cut to the proper size, when the drum cavity needs protection from the air, or when it is necessary to resort to artificial means to keep the ossicula in position.

Acute Otitis of the Middle Ear, Complicated with Mastoiditis, Cured with Antistreptococcus Serum.

A girl of 8 was brought to Wodon for treatment, with a temperature of 39.5 to 41 degrees C., pulse 140, intense headaches, insomnia, tendon spasms and agitation, with numerous streptococci in the pus from the ear. Twenty cubic centimeters of antistreptococcus serum were injected in the inside of the thigh, and an improvement was evident the next day. The temperature fell; the discharge from the ear gradually diminished and finally ceased; the mastoid region lost its inflamed appearance, and in ten days the child was entirely cured. The disfigurement from trephining was avoided, and as Wodon remarks: "Our conduct is henceforth traced for us."—*Presse Méd.* from the *Presse Méd. Belge*, No. 44, 1896; *Jl. Am. Med. Ass'n.*

S. S. B.

NEW INSTRUMENTS.

THE POST-NASAL LYMPHOTOME.

(A New Instrument Devised for the Removal of Adenoid Vegetations.)

BY JACOB E. SCHADLE, M.D., ST. PAUL, MINN.

In view of the fact that a number of instruments and modifications of the same are in existence for the ablation of lymphoid masses at the vault of the naso-pharynx, it may seem needless to add another to the list. But when the peculiar situation and anatomical construction of the post-nasal cavity, as well as the difficulties encountered in operating in this space with safety and ease, are considered, an improvement over former surgical procedures should no doubt receive some recognition.

The ring knife, the cutting forceps, and many varieties of Gottstein's curette all possess merit, and have advanced the surgery of the naso-pharynx. Yet none, on account of its mechanism, is wholly free from danger of producing damage to adjacent normal structures, especially when the instrument is in the hands of a novice.

The organs likely to become injured by an improper use of these instruments are the posterior extremities of the turbinated bodies, the septum, the Eustachian cushion, and the mucous membrane of the oro-pharynx.

The accompanying cut is herewith presented to illustrate a new device, which the writer believes will largely overcome the objections

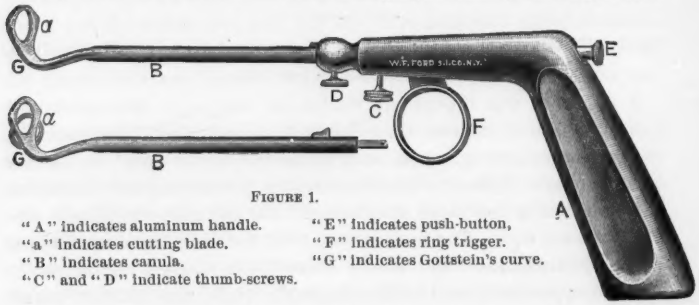

FIGURE 1.

"A" indicates aluminum handle.
"a" indicates cutting blade.
"B" indicates canula.
"C" and "D" indicate thumb-screws.
"E" indicates push-button,
"F" indicates ring trigger.
"G" indicates Gottstein's curve.

to other instruments now used in adenoid operations. The principle of a tonsillotome has been followed in its construction, and the knife, which is flexible, owing to the curve employed at the distal end to conform to the naso-pharynx, is so guarded that the infliction of injury

to normal tissue is made impossible. For convenience of manipulation a universal pistol-shaped handle (A) made of aluminum is used, to which is attached the cutting blade (a) contained in a canula (B), fastened to the handle by means of thumb-screws (C) and (D). The push-button (E) is pressed upon by the thumb in the adjustment of the knife for an operation. The ring trigger (F) receives the index finger, which pulls the knife through the growth operated upon. The cutting blade can be removed from the canula for cleansing purposes. Blades of different sizes are made, so that the operator can adapt himself to the age of the patient and the size of the lymphoid tumor. Under the writer's personal supervision the Lymphotome was made and perfected by the W. F. Ford Surgical Instrument Company, cor. 32nd St. and Fifth Avenue, New York City.

CORRESPONDENCE.

ABSCESS NASAL SEPTUM.

Editors LARYNGOSCOPE:

By a curious coincidence my eye falls upon Dr. Edward J. Brown's report of a case of abscess of the nasal septum in the March LARYNGOSCOPE, at the moment a patient with septal abscess is leaving my office. My case is that of a young gentleman who received a violent blow on the nose in boxing ten days ago. With the exception of some obstruction to breathing, slight increase in discharge, and sensitiveness when blowing his nose vigorously, he has had no nasal symptoms of consequence. His chief discomfort has arisen from frontal headache and deep-seated pain in the eyes, suggestive of sinus trouble. I excluded implication of the sinuses, and confirmed my diagnosis by evacuating nearly half a teaspoonful of pus through a free incision of the septal tumor.

It seems worth while to lay some stress upon cases of this kind, because the symptoms are misleading; because, as in the present instance, the accummulation of pus may be so high and so far forward as to escape observation unless the head is tilted well backward; and, finally, because early withdrawal of the pus by free incision is desirable, in order to preserve the integrity of the cartilage and prevent deformity.

CHAS. H. KNIGHT.

147 W. 57th St., New York City.

EDITORIAL DEPARTMENT.

ORIGINAL ARTICLES for publication should be in the Editorial Office on the 5th of the month preceding date of publication.

ILLUSTRATIONS necessary to elucidate the text will be furnished, without expense to authors, when suitable ink drawings or photographs are furnished.

SUBSCRIPTION price, $2.00 per annum in advance. Foreign countries, within the Postal Union, $2.25.

CONTRIBUTORS to THE LARYNGOSCOPE who desire reprints will please communicate with the Commercial Printing Company, 318 N. Third Street, St. Louis, Mo., stating the number they wish, at the same time that they forward the MSS. to the Editors.

COMMUNICATIONS and all drafts and money orders should be addressed to
THE LARYNGOSCOPE,
P. O. Box 787, St. Louis.

EDITORIAL.

NASAL REFLEXES.

Dr. Arthur G. Hobbs' paper, in the March issue of THE LARYNGOSCOPE, has attracted considerable attention. No doubt many of our readers have met with some such unusual cases. Dr. Hobbs is very anxious to collect reports of unusual cases of nasal reflexes, and will gladly give credit to any physician who will send him a history of any case that they have met with.

So far no one has made an exhaustive study of such cases, and yet the subject is important, and warrants careful consideration.

THE HUMAN KINETOSCOPE.

Considerable interest has been manifested in the advent of that latest of Edison's marvelous electric creations, the kinetoscope, and its foster-sister, the phantoscope; an advent heralded by the world of science with many expressions of appreciation for the skill and ingenuity of such delicate construction and sensitive mechanism. Our admiration knows no bounds as we see an almost living reproduction of every detail of action or of any series of complicated movements possible to animal or mechanical motion.

Yet do we stop for a moment to consider that the impressions of a picture once seen are received on a sensitized area even more delicate than the rapidly-revolving, photo-electric film of the kinetoscope recorder? From earliest childhood our brain is an active kinetoscope, recording with almost every heart-impulse a perfect, permanent picture, which can be recalled and reproduced at will.

An Alpine panorama, a grand painting, a masterpiece of sculpture, can be conjured up before us, every delicate detail of outline, every phase of light and shade, every beauty of form and feature, so accurate and vivid that our entire being is overwhelmed with the mighty strength of the Creator of such a mechanism.

Nor are we dependent on our eye alone for the lens which gathers the pictures for our human, pageless album. We hear a grand oratorio, a master of instrumental music in the rendition of the simplest melody or most complicated chords, a vocal solo of matchless richness and softness, and the picture is indelibly recorded in the mysterious pages of the brain. We are ushered into a darkened room; everything is noiseless; we are conscious of but one impression; a sweet, fragrant odor reaches our olfactory bulbs, and we see before us—what? A dark-red flower, with a symmetrical arrangement of soft, delicately-tinted petals and sepals, a graceful stem, characteristic thorns, and the picture is reproduced by our human kinetoscope—a *red* rose. The odor which we have perceived may have a slight variation—the film changes with a flash, and our rose is *white*.

Half a century may elapse ere that special page in our living album is reached again, but the picture is still there, bright and fresh as when first received on those indelible films, the microscopic nerve-tissue.

And these millions of films, reproducing everlasting pictures, are produced—how?

THE SWING OF THE PENDULUM.

A comparison of the trend of the articles published on the treatment of the diseased conditions of the nasal cavities of ten, or even five, years ago and of the present day is instructive and interesting. Then the *classical* treatment mainly consisted of the use of such remedies as primarily irritated—astringents—with the idea that the secondary effect would be beneficial; now the use of milder remedies is advocated. Much of this change has been brought about by the complaints of patients that the irritant plan of treatment—if it can be so called—did not give them the expected or hoped-for relief. Then but little operating was done, the main dependence being placed on local medication of the diseased parts; now surgery seems to be the main reliance. This change has been brought about by the non-effectiveness of the former treatment, and also by the discovery of the properties of cocaine and eucaine.

The change was rather sudden, and many authors seemed to think, to judge from their articles, that surgery offered a more certain method for the *cure* of the majority of nasal diseases. The fact that spurs, deflections, hypertrophies and other abnormalites were the *result* and not the *cause* of the disease, seemed to escape their observation.

Brilliant operations, quick reliefs and astounding results were heard of, and then—the case dropped out of sight. Many of these cases are now under the care of other physicians for relief from the results of these operations. To-day there is a reaction, and the mean between these two extremes is being reached, although we are still a considerable distance away from it.

The fact remains that surgery should be employed to as little an extent as is compatible with the abnormalities present in the case; then local, constitutional and hygienic treatment must be depended upon to remove *the cause* of the disease. Removal of the *result* does not materially affect the *cause*.

CONTRIBUTIONS TO THE MAY ISSUE.

The May issue of THE LARYNGOSCOPE will contain original articles, editorials, transactions of the Laryngological Section of the New York Academy of Medicine, society proceedings, and the usual condensation of the principal articles from current literature. The following list of original communications will appear in the May issue, or as soon thereafter as possible:

Dr. Ziam, Danzig, Germany: "The Relation between Nasal and Mental Diseases."

Dr. Marcus Kenyon, New York: "Case of Primary Acute Mastoiditis, Bilateral, without Ascertainable Cause Occurring in a Patient with Slight Sclerosis of the Middle Ear. Cured by Operation."

Dr. L. L. Mial, New York: "A Mechanical Saw and Septal Plane."

Dr. W. C. Phillips, New York: "Localized Epithelioma of the Larynx."

Dr. Augustus McShane, New Orleans; "Two Cases of Foreign Body in the Trachea; Tracheotomy; Recovery. Cicatricial Atresia of Both Choanæ."

Dr. J. B. Keber, St. Louis: "Report of Two Interesting Cases."

Dr. Thos. F. Rumbold, St. Louis: "Remarks on Middle-ear Inflation."

Dr. Arthur G. Hobbs, Atlanta: "When Not to Inflate the Middle-Ear."

Dr. Thos. J. Harris, New York: "Prognosis of Diseases of the Internal Ear, with Review of Cases."

Dr. Pierce Hoover, New York: "Hysterical Deafness, with Report of Cases."

Dr. O. F. Gambati, Houston, Tex.: "The Relation of the Teeth to the Ear, Nose and Antrum."

Dr. Wm. Porter, St. Louis: "A New Diagnostic Sign in Thoracic Aneurism."

Dr. S. Oppenheimer, New York: An article.

Sea Sickness; Its Cause and Relief.

The author, James L. Minor, says that the fact that deaf-mutes do not suffer from sea-sickness is evidence to him that sea-sickness is of aural origin. His belief is further strengthened by the fact that deaf-mutes can be turned around very rapidly in a circle without suffering from nausea or dizziness. From this the remedy suggested for the relief of sea-sickness is the anesthetization of the canals by means of an 8 per cent solution of cocaine dropped into the external auditory meatus.—*N. Y. Med. Jour.*

[In order that the cocaine may reach the semi-circular canals, it will be necessary to open the drum-head and the oval, or round, window before applying the remedy—a popular and remunerative procedure. It might be a question for the patient to settle, whether he would prefer eventual deaf-mutism to sea-sickness]. S. S. B.

SOCIETY PROCEEDINGS.

SOUTHERN SECTION AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY.

[CONTINUED.]

The Necessity of the Complete Removal of the Tonsils Whenever Diseased or Hypertrophied, by Dr. Louis J. Lautenbach, Pa. Read by title.

Spurs of the Nasal Septum as Factors in Diseases of the Respiratory Tract, by Dr. Edward F. Parker, of Charleston, S. C.

Dr. Parker calls attention to the radical difference, etiologically as well as clinically, between spurs and deflections of the septum. The former are direct results of hypertropic or vaso-motor changes along the sutural lines, causing perichondritis or hyper-ostosis, and perhaps secondarily producing stenosis, while the latter are primarily of traumatic origin, hypertrophic changes being only superinduced when the deviation is sufficient to cause stenosis.

Slight deviations produce no practical interference with nasal respiration, and demand no attention, as a rule; but spurs of a size apparently too small to impair the respiratory functions of the nasal fossæ frequently affect other parts by a reflex action. In actual practice the symptoms arising from these two morbid conditions may often be the same, when originating solely from mechanical obstruction to nasal respiration; yet in those cases where the patient is aware of no impediment to normal breathing slight deviations will produce no discomfort, while small spurs may cause extra-nasal symptoms. These observations have often been confirmed by the beneficial results which follow the removal of seemingly insignificant spurs in patients who were unaware of any stenosis.

Spurs along the sutural lines dividing the perpendicular plate of the ethnoid and vomer more commonly give rise to reflex symptoms than those situated along the suture separating the triangular cartilage and hard palate, because the former interfere with the region of the middle turbinate membrane, which has its sensitiveness or irritability increased by the distribution of the filaments of the olfactory nerve.

Septal spurs, by reason of their situation, exert a powerful influence on the whole respiratory apparatus. The peculiar nasal twang, the so-called "dead voice," nasal catarrh, or hypertrophic rhinitis, chronic post-nasal pharyngitis, purulent rhinitis, and chronic pharyngitis, are

all familiar and common results of nasal stenosis and interference with nasal respiration due to septal spurs.

They are important factors in the persistence of adenoid growths, somewhat rarely found in adults, the atrophy of the latter at puberty being prevented by the irritation and vascularity induced by the spurs. Their influence on catarrhal and sclerosing inflammation of the middle ear is somewhat doubtful, as the obstruction occurs upon the unaffected side very frequently.

Epistaxis, which is a common symptom of septal spurs, may lead to a suspicion of pulmonary hæmorrhage, as in a case reported. The effect of septal growths on the larynx, trachea and bronchi were discussed, and cases of dysphonia, aphonia, bronchitis, dyspnœa, cough, dysphagia, cervical neuralgia, and paroxysmal retching and hawking, were cited or reported as sometimes of intra-nasal origin.

The Treatment and Prognosis of Catarrhal Deafness in Young Children, by Dr. J. Aloysius Mullen, Houston, Tex.

Dr. Mullen referred to the pathology and treatment of catarrhal deafness in young children, and showed that the prognosis is not as grave in the majority of cases as we have generally been led to believe. In cases in which there is hypertrophy of the pharyngeal tonsil or of the nasal mucosa he first removes the obstruction, and then follows with the daily use of Siegel's pneumatic speculum with Politzer bag attached, and has found this the most reliable treatment. (Dr. Mullen's article will be published in THE LARYNGOSCOPE).

DISCUSSION.

In the discussion of Dr. Mullen's paper, Dr. Dench stated: "The influence of adenoid growths in these cases cannot be doubted, and their removal is of the utmost importance. I believe that the successful result in the cases reported has been more due to the removal of the hypertrophy than to the systematic massage of the ossicular chain. Personally, I do not think this form of exercise to be of any service; you cannot exercise the ossicular chain as a whole in these cases; it is impossible to apply it mechanically to that particular point where it is most needed, as this may be bound down by adhesion.

"My own practice is to remove the obstructing growths, and then let the cases alone. After I have removed the adenoid and the tonsils, I consider the case cured."

Dr. Stucky: "Dr. Mullen stated that he had found a considerable amount of hypertrophic rhinitis in young children. My experience in Kentucky is that we seldom see a child under ten years of age who suffers from hypertrophy of the mucous membrane of the nose. I do

not recall a single case of real hypertrophy of the inferior turbinal in a child under twelve years of age."

Dr. Mullen, in concluding the argument, stated: "In answering Dr. Dench's question, I would state that after the operations in some of these cases the hearing improved somewhat; several of the cases had already had the tonsils and adenoids removed, and came to me for the treatment of the deafness, which had persisted.

"In regard to the hypertrophic rhinitis referred to by Dr. Stucky, I would state that this might be influenced by the humidity of the atmosphere in which I live, being in close proximity to the Gulf."

Contribution to the Treatment of Deaf-Mutism by the Operation of the So-called Adenoid Vegetations, by Dr. J. Sendziak, of Warsaw, Poland. (Dr. Sendziak's paper is published in full, pp. 235-237, this issue).

The Treatment of Laryngeal Tuberculosis with Cupric Interstitial Cataphoresis, with the Report of Cases; the Advantages of Direct Laryngoscopy in this Method, by Dr. W. Scheppegrell of New Orleans.

Dr. Scheppegrell, after referring to the gravity of this affection, described a number of methods which have been advocated for its alleviation and cure. He described Heryng's method of curettement and the application of lactic acid, and compared it with the galvanocautery treatment, as advocated by Srebrny. The results in both of these treatments were somewhat better than those which have been previously reported, but still were not very encouraging. The first method was liable to hæmorrhage, and the second to considerable reaction from the application. Both were difficult to apply, requiring considerable manipulative skill, and neither of them was applicable in all cases.

He then described the principle of cataphoresis and his method of applying it to the larynx. He has experimented with a number of substances, such as creosote, guiacol, iodine, chloride of zinc and the oxychloride of copper. Guiacol was useful where the alleviation of pain was the principal object; the oxychloride of copper possesses marked microbicidal properties and stimulates the tissues to a healthy reaction.

In applying cupric cataphoresis, he uses spherical bulbs of pure copper, one-eighth to one-fourth inch in diameter, attached to an insulated handle. These bulbs, connected with the positive pole, are applied directly to the tissues, a current of two to five milliamperes being

used for three to ten minutes, the sitting being repeated every two or three days. A dispersing electrode, connected with the negative pole, is applied to the back of the neck. He has used copper needles for this purpose, but abandoned them for the copper bulbs. The copper in contact with the tissues is electrolized, and the oxychloride of copper, which is produced, passes into the tissues. Cocaine anæsthesia (5 per cent. solution) is necessary in the majority of cases.

He then explained the great advantages of Kirstein's method of direct laryngoscopy in this method of treatment.

Dr. Scheppegrell has found the following advantages from the application of cupric electrolysis in the treatment of laryngeal tuberculosis:

1. There is *no real destruction of the tissues*, and *no laceration of the surfaces* which might form a point of entrance for new pathogenic germs for reinfection, as is the case with the method of curettement, and, to a certain extent, also, with the galvano-cautery and simple electrolysis. The cure is effected by the healthy reaction of the tissues, in the same manner that we often see specific lesions heal when the system is under the influence of mercurials.

2. In the cases which he has treated with this method, there has been *absolutely no reaction or hemorrhage* following the application—a point of great importance with tubercular patients.

3. This method does not demand the high degree of manipulative skill required for curettement and the electro-cautery in the larynx, and is especially simple when direct laryngoscopy can be used.

4. This method is applicable to *all cases* of laryngeal tuberculosis.

The clinical history of three cases in which this method was used with satisfaction is then given. In the first two cases, the ulceration was cured and the infiltration diminished, when the treatment had to be discontinued on account of the aggravation of the pulmonary disease, to which the patient subsequently succumbed.

In the third case, in which no pulmonary disease could be detected, but in which the bacilli of tuberculosis was found after repeated examination of the sputum, and in which the clinical signs of tubercular laryngitis were very marked, the patient had lost twenty-five pounds, was so weak that he could walk only when supported, and deglutition was so painful that he could swallow only with the greatest difficulty. There was no history of any specific affection. Antiphthisin had been used without effect. The arytenoid region was much infiltrated, with extensive ulceration of the inter-arytenoid fold, extending to the left over the ventricular band. The epiglottis was tumefied with ulceration of the left anterior portion. The anemia,

infiltration and ulceration presented a typical image of laryngeal tuberculosis.

The cataphoric treatment was at once commenced in this case; at first every three days and afterwards twice weekly. Improvement was noted after the third application, and after the ninth the ulcerations had healed so far that the patient could swallow semi-solid food with but little pain. The case continued to improve, and eight weeks later was entirely cured, with the exception of a slight huskiness due to injury of the vocal cords. Six months later the larynx showed no return of laryngeal disease.

PRESENTATION OF NEW INSTRUMENTS.

Dr. Scheppegrell then exhibited a number of electrodes for cupric electrolysis of the larynx, some of which were to be used with the laryngeal mirror, and others by direct laryngoscopy.

Dr. Scheppegrell also exhibited a new mechanical saw and masseur. In this mechanical saw the handle, instead of being at right-angles with the direction of the saw, is at an obtuse angle, thus giving it the shape which has been found the most convenient in ordinary nasal saws, and which prevents the hand holding the saw from coming too near the face of the patient. In order to permit this position, the backward and forward movement of the saw is obtained by means of a ball revolving at an eccentric. The saw is operated by the ordinary motor or dental engine.

The second advantage claimed for this instrument is that the saw is at a higher plane than the transforming mechanism, so that it enables the operator to see more fully the work that is being done by the saw within the nasal cavity.

The third advantage is that the arrangement by which the saw-blades are held in position enables the saw to be used, not only upwards and downwards, as in the mechanical saws already described, but also at any required angle.

The fourth, and not least, advantage is that the movement of the saw may be instantly started or stopped, or increased or decreased, by the movement of a sliding thumb-piece in the handle, without arresting or changing the movement of the motor. The same instrument may be effectively used for massage of the upper respiratory tract. This instrument is made by Messrs. Geo. Tieman & Co., New York.

At the evening session, Judge A. G. Brice, chairman of the Auxiliary Reception Committee, read an interesting paper on the "Division of Labor and the Development of Specialism," which was listened to with marked attention. The Section then adjourned.

Official Organ.

A motion was made by Dr. Edward F. Parker, of Charleston, S. C., seconded by Dr. J. A. Stucky, of Lexington, Ky., that the THE LARYNGOSCOPE be made the official organ of the Southern Section of the American Laryngological, Rhinological and Otological Society: which was unanimously carried.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON LARYNGOLOGY AND RHINOLOGY.

Stated meeting held on Wednesday, March 24th, 1897, at 8:15 P.M. Joseph W. Gleitsmann, M.D., Chairman; T. P. Berens, M.D., Secretary.

PRESENTATION OF CASES.

Papilloma of Larynx with a Peculiar Accident, shown by Norton L. Wilson, M.D., Elizabeth, N. J.

a. Frank Reilly, age 3 years, came to my clinic at the Elizabeth General Hospital in September, 1894. Papilloma of the larynx was diagnosed, but owing to the smallness of the larynx it was found impossible to remove it through the mouth. The growth sprang from the right side of the larynx, just below the vocal band, and with forcible expiration could be thrown up between the bands. It grew rapidly, and tracheotomy was performed. The patient did badly under chloroform, but some days after this operation the remaining rings of the trachea and lower half of the larynx were split and the growth removed. This afforded only temporary relief; and several months after the first operation it was repeated, this time more thoroughly, but again the growth grew rapidly. An intubation tube was introduced for the purpose of making pressure. This was coughed out in a few hours, and I then resorted to the alcohol spray, which was faithfully used for four months; not finding the good result mentioned by Dr. Delavan, I again introduced the intubation tube, using the 3–4 year old size. The boy is now 5 years old, and it was my desire to introduce the largest tube possible. The tube was introduced after some little difficulty, and the head rested upon the vocal bands and apparently filled the larynx very well. The first time the nurse removed the inner tube of the tracheal tube (for that was allowed to remain), the laryngeal tube fell into the fenestra of the tracheal tube. You will observe from the cut that the intubation tube turned within the larynx so as to accommodate itself to the opening in the tracheal tube. It became so thoroughly engaged that it was impossible to extract it

through the mouth. The upper end of the tube could not be felt in the larynx with the finger, but the extractor would slip down between the vocal bands and could be plainly felt to strike the metal tube. It could also be felt by the finger in the œsophagus through the muscular walls of the trachea. Fortunately the patient did not suffer much from dyspnœa; but the tubes were becoming foul, and I determined to remove them through the trachea. The ring below the tracheal tube

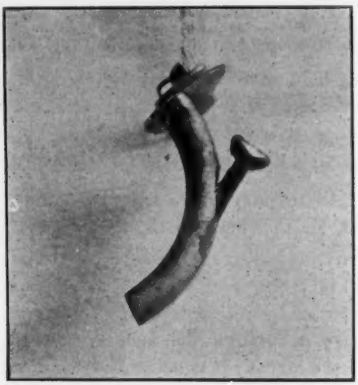

FIGURE 1. Intubation Tube in a Tracheal Tube.

was split and two above it, and with but little difficulty the tubes were removed just as you see them in the cut. My only explanation of the tube dropping down is that the continuity of the lower part of the larynx was destroyed by the previous operation, and thus allowed the tube to slip down. My only reasons for exhibiting this case is as a warning to others who may not be so fortunate in having the patient survive.

FEATURES OF THE CASE.

1st. Tracheotomy tube worn for 2½ years without injury to general health.

2d. Four months' use of alcohol spray did not improve him.

3d. Peculiar accident as mentioned above.

4th. The boy has received no treatment since last September. Up to the holidays he could not breathe through larynx. He now breathes through larynx, showing some improvement without treatment.

b. Case of **Atrophic Rhinitis, Showing Sphenoidal Opening.** Presented by Wendell C. Phillips, M.D.

This case was one of advanced stage of atrophic rhinitis. All the

turbinated bones were gone except a thin plate of the middle turbinated bone on each side. These were so far distant from the septum that the openings of the sphenoidal cells were brought distinctly into view; this is of particular interest to us in view of the fact that a discussion took place in this section last year in regard to the distance of these openings from the top of the nose.

In this case the distance is exactly 3¼ inches from the tip of nose externally. It seems to me that, on account of the great diversity in the external contour of the noses, all measurements should be from the lower end of the anterior border of the septum, and even then there will be considerable variation.

c. Case of **Tumor of the Larynx,** presented by Wendell C. Phillips, M.D.

This patient was brought before the section by G. C. Gage, M.D., who wished for a careful examination by the members in order to aid him in making a diagnosis. He gave the following brief history:

Man, forty-two years of age, cigar-maker; he is a smoker, and has had frequent attacks of laryngitis, lasting four or five days. He gives syphilitic history.

Two years ago a swelling appeared at the base of the tongue, which was soon followed by much swelling of the neck. The arytenoids were involved by the tumor, and he now suffers greatly from aphonia, dysphagia and dyspnea.

This meagre history is due to the fact that he is a foreigner, and a history is obtained with difficulty.

DISCUSSION.

Dr. Quinlan asked if a section of the growth had been obtained for examination. The subjective symptoms were absent to a large extent, which added greatly to the difficulty in making the diagnosis.

Dr. Gleitsmann advised laryngotomy. Should cut down to base of tumor and learn character of growth.

Dr. Wright said we must have further subjective symptoms to enable us to make a diagnosis. An adeno-carcinoma may last three or four years without working down. Should expect some ulceration and secretion. To him it looked more like an adeno-carcinoma or sarcoma.

Dr. Freudenthal once thought the case was of a tuberculous nature. He had removed parts of it and saw a decided change afterwards; the growth grew rapidly, and was twice as large as when he last saw it. He had since given up idea that it was tuberculous. The left side was not congested, but rather anæmic; afterwards a change came on, such as now noted.

Dr. Phillips, in closing the discussion, said he regretted he could not give the section a more clear history of the case; but he would have a section removed for microscopical examination, and at the next meeting would no doubt be able to give a more complete history, as well as the pathologist's report.

Dr. Gleitsmann presented a case of **Tumor of the Larynx,** which resembled a so-called prolapsus of Morgagni's ventricle. According to the latest researches by B. Fraenkel, Chiari and others, these formations have to be considered a hyperplasia of either the lower surface of the ventricular bands or of the upper one of the vocal cords.

The woman, thirty years of age, complains of hoarseness since July, of pain at deglution since eight weeks. She had received treatment before, and lately two pieces are said to have been removed, with but temporary and slight relief. At inspection is seen a red protuberance at the right side of the larynx, situated between the false and true cord, which after coercion can be pushed back into the ventricle, to appear again at once when released. The whole larynx is slightly hyperæmic, but the growth does not appear to the speaker to be tuberculous in nature. The lungs being sound, and the appearance of the patient otherwise healthy, he hopes to be able to reproduce the patient after removal of the growths, together with a microscopical report.

PRESENTATION OF SPECIMENS AND NEW INSTRUMENTS.

a. Dr. Robert C. Myles presented a specimen of Sarcoma of the Tonsil; Microscopial Reports, and Description of Operative Procedures.

Mrs. F—, aged 41, applied to me on Jan. 5th, 1897. She stated that in November last she began to be troubled with her throat, and that twice during this month she lost her voice entirely for four or five days. Since that time she has been troubled with a constant desire to clear the throat. She also complained of irregular pains in front of the ears.

Upon examination, a peculiar, pale, semi-transparent tumor was observed protruding from the lower part of the left tonsil, and extending upon the base of the tongue. It was oblong and acorn-shaped; was rather firm to the touch, and presented the general appearance of sarcoma. A portion of it was removed and sent to Dr. Prudden, who, in his report, said: "The only thing which I can make out with certainty is a chronic interstitial fibrous hyperplasia. There is no evidence of epithelioma; there is fibrous hyperplasia; the possibilities of sarcoma remain undetermined."

On Jan. 13th, I removed the tumor within the lines of the pillars,

and sent the specimen to Dr. Prudden, who reported as follows: "The anatomical diagnosis is accordingly polyhedral and spindle-celled sarcoma."

On Feb. 12th, the growth was removed by cutting through the upper portions of the palato-glossus and the palato-pharyngeal muscles down to the constrictor; the parts were dissected with the electric knife downward to the lower border of the tonsil, exposing the fibers of the constrictor muscle; the finger was passed behind the mass, which was pressed forward, and I removed the lower part with the electric snare. Three weeks later there was evidence of recurrence; the suspicious formation was removed with an electric knife.

A specimen was sent to Dr. Vissman, who reported as follows:

"It is not altogether improbable that you may have a case of 'Bilroth's Malignant Lymphoma,' or pseudo leucæmia, but the piece I have examined excludes sarcoma."

I also sent a specimen to Dr. Prudden and received the following report:

"Should the question arise whether it may not be after all a simple hyperplasia of the tonsil, the extension of the new tissue among and into adjacent muscle bundles, crowding the muscle fibers apart, producing extensive atrophy and destruction of some of them, furnishes corroborative evidence of the strongest character as to the sarcomatous nature of the growth. The morphological diagnosis is accordingly polyhedral and spindle-celled sarcoma."

I also sent a specimen to Dr. Jonathan Wright, who made this report:

"I am more than usually inclined to make a positive diagnosis of small, round-celled sarcoma, bearing in mind, however, the fact that the subsequent histories of these cases frequently tend to disprove even as strong a microscopial diagnosis as is warranted here."

The diversity of opinion entertained by pathologists concerning microscopial evidences of sarcomatous growths in the lymphoid tissues is sufficient reason for calling your attention to this case.

b. Demonstration of Miculicz Glass Canulæ for Laryngeal and Tracheal Stenosis, with remarks by J. W. Gleitsmann, M.D.

The speaker recommended the use of these tubes in severe cicatricial stenosis from disease, traumatism, etc., and not in stenosis of slight degree, which can be treated by bougies or intubation. He showed large drawings, which demonstrated very clearly the tubes in position.

In introducing the tube, an incision is made six to eight centimeters in length. If the tube employed reaches beyond the vocal cords, one

of triangular shape should be used. Tubes are usually left in two or three days. Patients soon learn to remove the tube themselves.

Dr. Kuemmel, in giving histories of eleven cases, noted that two died and nine were cured; average time of treatment was fourteen months. The speaker then reported a few cases briefly. The case that was cured quickest was one of subglottic laryngitis; cured in four and one-half months. Another case which required over twenty-five months to cure, was one of stenosis following typhoid fever, in which there were recurrences of cicatricial tissue. Two of the cases reported were papillomatous.

Paper of the evening was read by Jonathan Wright, M.D. Subject:

The Pathology and Interrelation of Various Intranasal Manifestations of Chronic Inflammation.

Chronic inflammation of the nasal mucosa is a slow process, modified by internal and external influences, by climate and occupation, by systemic dyscrasiæ and racial peculiarities, by local configurations and concomitant lesions, by sex and age. Its clinical manifestations are considered under many different heads. Nasal polypi and polypoid degeneration, ethmoiditis, sinus inflammations, hypertrophic rhinitis, vascular hypertrophies, bony cysts of the middle turbinate, spurs and deviations, are merely manifestations of the same process modified by circumstances and differences of the configuration of different regions and in the structure of the mucosa and its underlying cartilage and bone. The pathology which underlies them all binds them together and furnishes missing links in their etiology. In order to draw a little more attention to this fundamental unity of various intranasal conditions, as well as to emphasize certain points which seem of interest or likely to excite discussion, this paper has been prepared.

It is unnecessary to speak of the etiology of chronic inflammation in the nose farther than to remind you that vasomotor excitability is an indispensable factor. This, arising from local, or reflex, or systemic causes, such as coryza or dust, dyspepsia and constipation, rheumatism and gout, supplies the over-nutrition to the tissues which leads to the changes in the mucosa.

In the region of the inferior turbinated bone, especially at its posterior and inferior border, and at the adjacent parts of the septum, we have a thick, vascular mucous membrane covering a well-defined periosteum, which in turn covers a firm bony structure. The walls of the venus sinuses and the surrounding stroma are well supplied with unstriped muscular fibres.

We are all familiar with those hypertrophies at the posterior ends of the inferior turbinated bones, which present a mamillated or mulberry

surface. It is possible to trace all degrees of this furrowing of the surface up to a condition which, to the naked eye, bears such a close resemblance to papilloma. How this occurs is a matter of considerable interest. Doubtless there is a continuous growth of fibrous tissue in these ridges and processes, but evidently the form it takes is dependent largely upon the dilatation and collapse of the erectile tissue. Normally, the fibrous tissue is largely made up of curling fibers, which have the power of diminishing the volume of the mass regularly, when vaso-motor contraction drives the blood out of the venous sinuses. We have in the unstriped muscular fibers scattered through this stroma a powerful adjuvant in this physiological action. If you will note a posterior body distended by blood, when there is no fibrous hypertrophy present, you will see a smooth surface. In a few minutes, vasomotor contraction may suddenly occur and the engorged tissue collapses; then in the post-nasal mirror you will see little rugæ on the surface. Even in the normal state a slight folding occurs. When the fibrous hyperplasia has markedly advanced, we find that the elastic fibers have lost their characteristic appearance. They have been replaced by, or metamorphosed into, long straight ones of low organization. The unstriped muscular tissue has largely disappeared. The surface epithelium is somewhat metamorphosed, and the number of its layers increased. After these changes begin, collapse becomes more or less incomplete, but the furrows grow deeper through the growth of the fibrous tissue.

The vascular dilation increases in the deep vessels; but near the surface, through the constricting action of the pressure of the growing fibrous tissue, the smaller network becomes more or less obliterated and we have an inert mass blocking up the inferior meatus. This result of chronic inflammation may be observed in the nose wherever there exists the so-called erectile tissue. In places on the septum, varying in different individuals as to amount and exact locality, the erectile tissue may also frequently be found as well as upon the inferior turbinated bone. In Zuckerkandl's work (Norm. und Path. Anat. der Nasenhöhle: Taf. 11, 1, 2, Vol. II, 1892) you may see these ridges and folds of the hypertrophied mucous membrane, and many of you have, doubtless, observed the condition clinically. Hopmann (Virchow's Archiv., No. 93, S. 234-6.), Zarniko (Virchow's Archiv., No. 128, S. 132), Kiesselbach (Virchow's Archiv., No. 132, S. 371.), have reported rare papillary conditions in certain growths of the middle turbinated, which in another paper I hope to show are connected with the development of œdematous polypi. You will frequently see in these vascular hypertrophies that the tissue in the large growths

of long standing cases looks, in situ, translucent and watery, the color being either pale or dark red. This, when snared off, will be seen to exude watery secretion as it contracts. Examined microscopically, you will observe œdematous areas similar to the structure of the mucous polypi of the middle turbinated. These areas are usually observed at the periphery of the lobules close beneath the epithelium. These are links in the pathology which connect vascular hypertrophies of the inferior turbinated with œdematous conditions of the middle turbinated bone, the varying preponderance of the different manifestations of chronic inflammation depending upon variations of the anatomy of the mucosa. There are also certain differences in the character of the hyperplasia and degeneration of the fibrous tissue of the mucous membrane, according to the age of the patient. In people past the age of forty-five, you will begin to observe that the fibrous tissue fibers are losing their outlines, and we have large areas of structureless material appearing as a result. The older the patient the more marked is this appearance. The same change is sometimes seen in younger subjects of low vitality.

Bone disease is more frequently observed and more pronounced in the ethmoid and its process, the middle turbinated bone; but in extensive disease of the mucosa of the inferior turbinated, osteophytic deposits are found along the lower border of the bone when small portions are removed surgically, and they may frequently be observed in anatomical preparations of the skull, evidently due to the involvement of the periosteum in chronic inflammation. In ordinary ecchondroses of the septum, to be carefully distinguished from dislocations and curvatures, there is nearly always thickening of the mucosa which covers them. Microscopically there are evidences here also that the inflammation has spread through the mucous membrane to the perichondrium, and that we have an analogous deposit of cartilage cells. These cartilage cells have nearly always changed to some extent to bone. On the bony septum in exostoses there is a similar proliferation of bone. It seems to me that septal deviations and curvatures are due to a certain extent to this hyper-nutrition, causing growth in the vertical and horizontal diameters of the plane of the septum.

Not only is vasomotor excitability a connecting link in the etiology of the fibrous and vascular hypertrophies of the lower nasal regions, but it also plays an important part in the production of œdematous polypi. In hay-fever the vasomotor derangement originates largely in some vice of the central nervous system. According to my observations, chronic nasal occlusion rarely antedates the first attack of hay-fever. Nasal polypi, when present, are rarely found until the patients

have suffered from two or three attacks, usually not until after many seasons. A prominent symptom of hay-fever is the nasal watery discharge during the attacks. This fluid comes by transudation from the dilated blood-vessels. The mucous membrane is pale and water-logged, though swollen and sodden. The microscope shows it to be similar to the ordinary nasal polypus. After frost the condition subsides, and many cases then present a fairly healthy mucosa. The vessels are able to regain their tone, and to hold within their walls the serum of the blood. After a number of attacks they gradually lose their power. After the vasomotor excitement subsides, a little œdema still remains. This increases; and with decrease in the number of glands, and a thickening of the epithelium, there gradually develops an œdematous rhinitis, and the formation of pendant areas, which we term mucous polypi. Clinical and microscopical observation have convinced me that in many cases of hay-fever this is the sequence of events. Though this may not occur uniformly, I nevertheless believe that often the nasal polypi which accompany hay-fever are neither the cause of it nor a coincidence, but the result of it. Study of rhinological literature and of nasal growths microscopically, seems to justify us in thinking that true myxoma does not occur in the nose.

The mucous membrane on and above the middle turbinated bone is less vascular than in the region of the inferior; the epithelium is more delicate, and is supplied with cilia. There is not so much fibrous tissue, and the periosteum is less dense. The bone is made up of delicate, branching plates, lined on both sides with mucous membrane, the deep layers of which communicate with one another in places through spaces in the bone. In a paper dealing with the vascular mechanism of the nasal mucosa (*Am. Jour. Med. Sciences*, May, 1895) I have shown how the deep radicle arteries and veins enter the nasal chambers together through the same bony canals; so that vasomotor dilatation of the artery not only lets in some more blood to the mucosa, but, by encroaching on a neighboring vein compresses it, and thus obstructs the venous return. A permanent dilatation of the artery through vaso-motor paresis, usually dependent upon chronic inflammation, brings about a condition of engorgement of the deep sinuses in the erectile tissue of the inferior turbinated body. In the mucosa of the middle turbinate, however, the same condition is favorable to the exudation of the watery parts of the blood from the peripheral thin-walled vessels. The formation of inflammatory deposits of cellular, fibrous or bony character would produce the same result; for the walls of the deep veins, though scarcely supplied with muscular fibers, are thin, and very much more compressible than the thick,

muscular walls of the arteries. If you will examine the normal mucous membrane in the young animal, or in the human infant, you will find strong evidence that more or less of this exudation goes on normally. You will note that the nuclei of white cells without the cell bodies are washed through or between the endothelial cells of the vessels into the stroma, and through the epithelial lining of the glands and of the surface. You will see that in places the cilia of the surface epithelium is crowded with these nuclei, which are really only cellular detritus.

In the nose gelatinous mucous polypi are produced by inflammation only when some of the causes mentioned brings about chronic congestion of the parts and the effusion of an abnormal amount of serum. Some hyperplasia of the stroma, some degenerative changes in the glands, take place and the surface epithelium occasionally becomes thickened and metamorphosed in places into flat cells. All these changes not only prevent the reabsorption of the serum, but to some extent prevent it from exuding at the surface.

The bone normally contains abundant areas which are filled with delicate connective tissue producing the osteoblasts and osteoclasts which line the bone. In some places small cavities, similar in structure to the larger ethmoid cells, have been shut off during embryonic life from communication with the surface. In the middle turbinated these tiny cells are lined with cylindrical ciliated epithelium. In the first place the bone tissue may be greatly increased in amount by the excessive activity of the osteoblasts. Accompanying this almost invariably some rarefaction is caused by the activity of the osteoclasts. When this process occurs in the walls of these small bony cavities an increase in their diameter follows, the osteoblasts depositing bone salts and forming bone cells, and the osteoclasts along the inner surface absorbing bone salts and disintegrating bone cells. Histologists tell us that osteoblasts are converted into osteoclasts, and inversely that osteoclasts may be converted into osteoeblasts. These patches of connective tissue lying in the bone and communicating frequently with what is external to it are ordinarily known as the Howship lacunæ of bone.

It is a curious clinical fact that the majority of cases of atrophic rhinitis and of bony cyst of the middle turbinated occur in women, while pure fibroma of the nasal pharynx is found almost exclusively in men. This pathological process which I have considered previously (*N. Y. Med. Jour.*, June 27, 1896) may not only enlarge a small closed cavity in the middle turbinated bone, but may act in the same manner in the prolongations into it of the cavities from the body of the ethmoid. In some specimens there is communication with the

cells of the body of the ethmoid, and the question arises as to whether this is not always the case.

It naturally follows that the effused serum tends to infiltrate not only the sub-epithelial stroma, but to extend through it and with it into the substance of the bone and by pressure cause dilatation, absorption, and granular disintegration of the bony structure. Now we have the clinical condition of ethmoiditis. This process is usually confined to the middle turbinated, but sometimes it extends higher up into the cells of the ethmoid body. Secretions there become infected and purulent, and we have the dangerous but rare form of inflammation which we know clinically as empyema of the ethmoid sinuses. It is this clinical difference which has led to the apparent difference in the experience of observers as to the frequency of ethmoiditis. This condition is often observed in the middle turbinate but it is much more rare in the ethmoid sinuses than purulent inflammation of the maxillary sinus. The occurrence of serous infiltration in inflammations of the mucosa of the middle turbinated region causes the frequent association of ethmoiditis, mucous polypi and cysts, of the bone.

Chronic inflammation with edema may spread to the mucosa of the other sinuses, and by obstructing their outlets cause a purulent affection. Or purulent inflammation may start first in the frontal maxillary sinuses, and by its ichorous discharges set up an inflammation of the intranasal mucosa around the hiatus semilunaris with the formation of polypi. This we know from the clinical observation that nasal polypi will promptly disappear, from the nasal chambers, or cease to recur after removal, when associated with empyema of the antrum, if the latter is drained by an opening from below. We occasionally meet with a case in which every one of the lesions mentioned are simultaneously present in the nasal chambers.

DISCUSSION.

Dr. Mayer said that the subject had been so thoroughly gone over by Dr. Wright that it seemed superfluous to attempt to add anything. He asked the speaker if he maintained the same position assumed last year, when he stated that there were eighty per cent. cocci in the mucous obtained from a normal mucous membrane of the nose.

Dr. Myles spoke of the spurs found in children, and how they resulted from trauma.

Dr. Wright, in closing the discussion, said that many observers, including Thompson and Hewlett, of London, had made the assertion that the nasal mucous membrane was absolutely sterile. In regard to the bactericidal powers of this mucous, which was claimed by some, he

did not believe in such action to the degree claimed. Dr. Park and he had made observations for two years, endeavoring to confirm Thompson's and Hewlett's statements in regard to the sterility of the nasal chambers, but with the contrary result. His previous bacteriological examinations were made ten years ago. He has no recollection of having made any such statement as referred to by Dr. Mayer.

In referring to spurs, he explained how they occurred as the result of blows, by starting up an inflammatory process. There was a solution of continuity at the point of greatest convexity, by bending, from the force and the cartilaginous hypertrophy, subsequently began at that point, resulting in ecchondroses.

This, doubtless, explained some of the ridges and spurs which were so ofted found, apparently depending on traumatism. A cartilaginous septum may be bent or dislocated, but never broken, by an external blow of the usual severity. It will always spring back to its original plane, the deviation and ecchondrosis resulting from subsequent inflammatory action.

The chairman announced the death of R. E. Swinburne, M.D., one who had been an active member and who was held in high esteem by all; his death was a great loss to the section; he asked that the section show their respect for the departed in the usual manner.

Hysteric Deafness.

Before commencing a more serious course of treatment, Cipriani advises treatment by suggestion when any unusual case of deafness presents itself, with a record of intermittency. He describes a case of this kind in which he secured permanent cure by simple suggestion, although every indication pointed to rheumatic deafness from exposure, and the patient, a healthy farmer of 44, seemed absolutely free from neurotic tendencies.—*Gazzetta degli Osp.*; *American Medico-Surgical Bulletin.* S. S. B.

Ear Suppositories.

Radlauer, of Berlin, makes suppositories for the ear of cocaine, menthol, resorcin, cocoa butter and olive oil, which also contain a cotton wad to prevent the escape of the fluids as they dissolve. They are recommended highly by Lasser, as they are effectual and save the introduction of the various medicines separately. The patients can insert them themselves, if necessary to save time and trouble in clinics, etc. They are designed to heal inflammations, to soften accumulations of wax, to prepare the ear for operations, etc., and are made in two sizes—for children and adults.—*Therap. Woch.*, December 13; *Jl. Am. Med. Ass'n.*, Jan. 9, 1897. S. S. B.

BOOK REVIEWS.

Atlas of Diseases of the Larynx.—By Dr. L. Grünwald, of Munich. Small octavo, with 100 pages of text, 45 lithographic plates, 107 chromo-lithographic and 25 wood-cut illustrations. J. F. Lehmann & Co., Munich, Publishers; 1897. Price, in cloth and gilt, $2.40. American agents, Lemcke & Buechner, 812 Broadway, New York.

There have been frequent demands for a work on laryngology, with a collection of well-executed illustrations of the pathological conditions of the larynx. This volume, edited by Grünwald, of Munich, and published in the well-known series of Lehmann's Hand-Atlases, is one of the handsomest productions of lithographic art we have yet seen. The 107 colored illustrations are accurate representations of the most frequent pathological conditions met with in laryngology, and present the various lesions in natural colors, with every delicate shading.

Twelve large colored plates, illustrating the microscopic pathology of the larynx, constitute the second part of the volume. The text accompanying the plates is in German; it is brief, and its main purpose is explanatory. The Atlas, however, is thoroughly comprehensible to English readers, and is invaluable to the laryngologist. The moderate price of the volume places it within reach of all.

Deaf-Mutism, a Clinical and Pathological Study. By James Kerr Love, Glasgow, Scotland. With Chapters on the Education and Training of Deaf Mutes by W. H. Addison, A.C.P., Cloth-bound, octavo; 370 pages; 15 illustrations. Glasgow: James MacLehose & Sons; 1896. McMillan & Co., New York. Price, $2.75.

Every aurist should make himself thoroughly familiar with every advancement in the department of otology which is represented by this excellent volume. Deaf-mutism has come to our notice more frequently of late, owing to the progress which is being made in the education of this class of unfortunates. If the medical men of every community would keep themselves better posted on this subject, and cope successfully with the large number of affections which are directly or indirectly responsible for the high rate of deaf-mutism, surprising results may be obtained.

The volume under consideration is a very exhaustive treatise, repsenting in a clear and concise form many interesting features of the pathology of deaf-mutism, and tracing the progress of education and training of the deaf to the present time.

The book is well worthy a careful perusal, and much valuable information may be gleaned.

Injuries and Diseases of the Ear, being Reprints of papers on Otology.—By Macbor Yearsley, F.R.C.S., London. Small quarto, neatly bound in blue and gold, with red and gilt title.
The Rebman Publishing Co., London; 1897. Price, 2 shillings.

In response to the wishes of friends, the author has published this series of interesting contributions in convenient book form. The series of papers are: I. On an Artificial Membrana Tympani; II. Foreign Bodies in the Ear and their Treatment. III. What not to do in Diseases of the Ear. IV. The Use of the Pneumatic Speculum. V. On the Care of the Ear in Children. VI. Aural Reflexes.

The papers are all up-to-date and the subjects are of a character to interest the progressive reader.

Handbook on Laryngology and Rhinology. By Dr. Paul Heymann, Berlin.

Sections 7, 8, and 9 of this excellent treatise on diseases of the nose and throat deal with affections of the pharynx, including chronic inflammations of this region and the post-nasal space; diphtheria, with its subdivisions; and also acute diseases of the nose, with suppurative and ulcerative manifestations of this cavity.

The chapter "der allgemeiam Symptomatologie, der Racbenpremkheibue" is the contribution of Dr. C. Block, of Freiburg. He divides his subject into distinct classes, *i. e.*: 1, disturbances of secretion; 2, sensibility; 3, mobility; 4, taste and smell; 5, audition; 6, voice production; 7, respiration; 8, speech. He dilates upon each of these divisions, and offers many interesting facts observed by himself and other authorities. He calls attention to the possible atrophy of the underlying muscular tissue in cases of marked atrophic conditions. Though this affection is not usually productive of alarming consequences, he mentions an instance in which suffocation followed the entrance of a dried crust into the larynx from the post-nasal region. Reference is made of the importance of bacteriological examination in disturbances of the secretion.

Hyperæsthesia or anæsthesia may be due to central or peripheral lesions, to therapeutic agents, to hysteria, or to general disease.

Emphasis is placed upon the importance of giving due consideration to the pharynx and post-nasal space in patients afflicted with aural disorders. The evil effects of obstructed respiration, and the various reflex neuroses which are apt to follow this condition, are vividly impressed upon the reader.

The treatment of pharyngeal disease may be general and special. The first comprises prophylaxis, dietetic and hygienic measures, climate, hydropathic methods, and general medication. Mechanical, electrical, medicinal, and operative measures constitute the special form of treatment. Post-nasal cleansing is upheld as an important element in getting good results, and as a prophylactic measure in infectious diseases. Gargles are retained as servicable adjuvants, and applications of astringents and alteratives still hold their position in local therapy.

Pharyngotomy is recommended for malignant disease attacking these parts. The danger of cocaine poisoning from submucoid injections is dwelt upon. This local anæsthetic is best applied by means of cotton-armed applicators, or by use of the atomizer. In some instances of cocaine intoxication, inhalations of nitrite of amyl succeeded in bringing about a pleasant recovery.

The galvano-cautery is considered a worthy addition to our armamentarium, and of late electrolysis has found warm advocates, who suggest its application for the removal of septal spurs and deviations. (Our American observers have not attained such agreeable results from its use).

Dr. E. Kronenberg, of Solingen, offers the article on acute inflammations of the pharynx and naso-pharynx. These changes are more frequently met with in individuals who suffer from diseases of the neighboring tissues. Extension by continuity plays an important part in diseases of this locality. Pathological factors in the nose bear a close relationship to inflammatory processes in the pharynx and naso-pharynx. Disturbances in circulation exert a retrograde influence upon the pharyngeal and other structures. Anæmia, chlorosis, cancer, syphilis, tuberculosis, gastro-intestinal disturbances, all are inclined to bear an unfavorable impression upon this vulnerable site. The soft, tender mucous membrane of the naso-pharynx, which at times has been found to be defective in epithelial covering, is supposed to be the entrance for the infectious micro-organisms which create so much general disturbance.

Herpes of the pharynx is said to be due to infection. It may appear in connection with herpes of the lip, or during the course of a pneumonia. If the latter occurs, the vesicles may contain the strepto-

cocci-pneumonia. Erysipelas, phlegmon, gangrene (following any of the infectious diseases), and mycosis of the pharynx are described.

Pharyngeal diphtheria occupies almost one-half of the eighth part of this well-written book.

Prof. G. Hoppe Segler, of Kiel, contributes a most interesting monograph. It is a valuable, historical, and a practical addition to existing literature. His remarks upon the pathological anatomy are concise and pithy. He omits the unnecessary, and gives the condensation of an exhaustive research. The various forms of the affection are given, and the many ideas of local treatment are mentioned. Serum injections together with local antiseptics are recommended. The indications are to preserve the patient's strength by tonics and good food, and keep up the heart's action.

The subject of chronic diseases of the pharynx and naso-pharynx has been placed in worthy and able hands. Prof. O. Chiari takes us back to the time of Hippocrates, and with increasing interest gradually leads us on to the present era. Well-executed illustrations explain the text and allow agreeable reading.

The ninth portion of the treatise takes up suppurative and ulcerative diseases of the nose, together with acute and chronic rhinitis. Drs. Hajek, Gerber, and Klempen have given their attention to these diseases. Dr. Block furnishes the treatment of nasal disorders. In suppuration of the nasal cavities, the accessory sinuses should always be examined before a positive diagnosis can be made. Ulcerations of these chambers are either of a traumatic or infectious character. Dr. Gerber describes four forms of acute rhinitis, *i. e.*: thermic, chemical, mechanical, and parasitical. The pathological changes are minutely given.

It is impossible to give deserving prominence to this valuable book in a curtailed criticism. Though we must naturally anticipate a repetition of existing knowledge in a work of this kind, we nevertheless can peruse same, feeling certain that our time will be amply repaid. The current literature has been exhaustively searched by the collaborators, and proper recognition has been given to original thought.

(LEDERMAN.)

[Several Book Reviews and the acknowledgment of Pamphlets received had to be omitted in this issue on account of lack of space.—EDITORS.]

SYR. HYPOPHOS. CO., FELLOWS

Contains the Essential Elements of the Animal Organization—Potash and Lime;

The Oxidising Agents—Iron and Manganese,

The Tonics—Quinine and Strychnine;

And the Vitalizing Constituent—Phosphorus; the whole combined in the form of a Syrup with a **Slightly Alkaline Reaction.**

It Differs in its Effects from all Analogous Preparations; and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE — CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, ***finds that no two of them are identical,*** and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, ***in the property of retaining the strychnine in solution,*** and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. ***Fellows.***"

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear, can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

Medical Letters may be addressed to:

Mr. FELLOWS, 48 Vesey Street, New York.